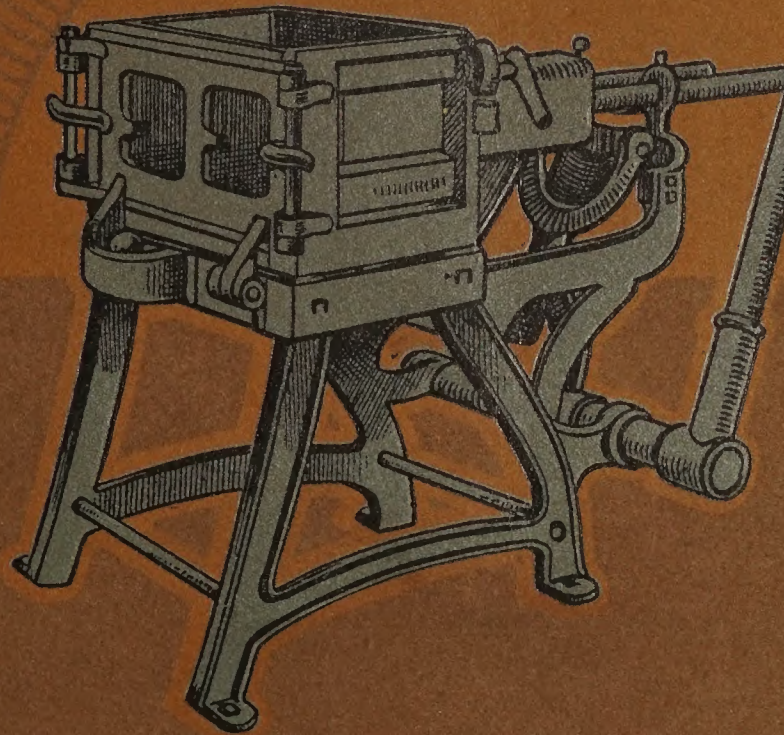


# IDEAL CONCRETE MACHINERY CO.

SOUTH BEND, IND. U.S.A.



THE ORIGINAL  
FACE DOWN  
HORIZONTAL CORE  
MACHINE

MARVELOUSLY SIMPLE  
MOST RAPID  
MOST DURABLE  
GREATEST RANGE

IDEAL CONCRETE MACHINERY CO. LIMITED, LONDON, CANADA



# CORRECT NET PRICES ON CATALOG NUMBER TWO

## IDEAL CONCRETE MACHINERY CO., *South Bend, Ind.*

NOTE: Always order from THIS price list and not from the printed prices in this catalog; they are obsolete.

DESCRIPTION	CATALOG PAGE	NET
Model "A" 8x8x16" Machine complete.....	9	\$125.00
Extra 8x16" Pallets .....	9 each	.25 1/2
Model "A" 8x10x16" Machine complete.....	10	135.00
Extra 10x16" Pallets .....	10	.32
Model "A" 8x12x16" Machine complete.....	11	145.00
Extra 12x16" Pallets .....	11	.38 1/2

NOTE: In ordering any one of the three above machines state if you want Rock Set as illustrated or some other design, which will be substituted without additional charge.

Model "A" 8x4x16" Solid Veneer Block Attachment.....	12	20.00
(This will make standard and plain end veneer blocks.)		
Model "A" 4x 8x16" Course Block Attachment.....	12	18.00
" "A" 4x10x16" " " " " .....	12	20.00
" "A" 4x12x16" " " " " .....	12	21.50

NOTE: With above Course Block Attachments state whether you want Vertically Tooled or Rock Face Plates and Doors.

Model "A" 8" Chimney Block Attachment.....	12	7.00
" "A" 8", 10" and 12" IDEAL Feed Table.....	12	5.00
" "A" 8", 10" and 12" Window Block & Sash Weight Attach. ....	12	1.00
" "A" 4" Course Window Block & Sash Weight Attach. ....	12	1.00
" "A" 8x 8x16" Attachment complete .....	13	40.00
" "A" 8x10x16" " " " " .....	13	45.00
" "A" 8x12x16" " " " " .....	13	50.00

NOTE: With above attachments state if you want Rock End Door or if you would prefer some other design.

Model "A" 8" Water Table Set.....	13	7.00
" "A" Circle Block Set in either 5', 7' or 9' radius....	13	4.00
" "A" Silo Set in either 5', 7' or 9' radius.....	13	6.00
" "A" Adj. Octagon Face Plates.....	13	5.00
" "A" 8" Doors, all designs, each.....	14	2.00
" "A" 10" " " " " " " .....	14	2.25
" "A" 12" " " " " " " .....	14	2.50
" "A" 8x8x16" Face Plates, all designs, each.....	14	3.00

Model "E" 8x8x24" Machine complete.....	17	170.00
Extra 8x24" Pallets .....	17 each	.44
Model "E" 8x10x24" Machine complete.....	18	180.00
Extra 10x24" Pallets .....	18	.52
Model "E" 8x12x24" Machine complete.....	19	190.00
Extra 12x24" Pallets .....	19	.60

NOTE: With each of the above machines 100 pallets are included in place of 50 as illustrated.

In ordering any one of the three above machines state if you want Rock Set as illustrated or some other design, which will be substituted without additional charge.

Model "E" 8x 8x24" Attachment complete.....	20	65.00
" "E" 8x10x24" " " " " .....	20	70.00
" "E" 8x12x24" " " " " .....	20	75.00

NOTE: With the above attachment state if you want Rock End Door or if you would prefer some other design.

Model "E" 8" Water Table .....	20	8.50
" "E" Circle Block Sets in 7' and 9' radius.....	20	5.00
" "E" Silo Sets in 7' and 9' radius.....	20	7.50
" "E" Adjustable Octagon Plates .....	20	7.00

DESCRIPTION	CATALOG PAGE	NET
Model "A" Panel Belt Course Sets, either 8, 10 or 12".....	20	\$ 4.00
" "A" Oval Belt Course Sets 8".....	20	11.00
" "A" " " " " 10".....	20	11.25
" "A" " " " " 12".....	20	11.50
" "A" Daisy " " " " 8".....	20	11.00
" "A" " " " " 10".....	20	11.25
" "A" " " " " 12".....	20	11.50

Model "E" 8x4x24" Solid Veneer Block Attachment.....21 25.00  
(This will make standard and plain end veneer blocks.)

Model "E" 4x 8x24" Course Block Attachment.....	21	26.00
" "E" 4x10x24" " " " " .....	21	27.50
" "E" 4x12x24" " " " " .....	21	27.00

NOTE: With above Course Block Attachments state whether you want Vertically Tooled or Rock face plates and doors.

Model "E" 8, 10 and 12" Window Block Attachment.....	21	1.00
" "E" 4" Course Window Block and Sash Weight Attachment .....	21	1.00
" "E" 8" Doors, all designs, each.....	22	2.00
" "E" 10" " " " " " " .....	22	2.25
" "E" 12" " " " " " " .....	22	2.50
" "E" 8x24" Face Plates, each.....	22	4.00
Model "A" 6 Brick Machine complete (without gang tamper) .....	23	90.00
" "A" 6 Brick Attachment complete (without gang tamper) .....	23	45.00
" "A" 6 Brick Gang Tamper .....	23	20.00
" "A" 6 Brick Combination End Face and Pallet in Rock, Panel, or Fancy designs, each....	23	3.00
" "A" 6 Brick Bottom Face Plates in Rock, Panel, or Fancy designs, each .....	23	4.00

Sill Plate 4x36".....	24	2.00
" " 5x48".....	24	3.50
Cap " 8x48".....	24	5.00

(Above furnished in different designs.)

Model "A" 8" Loop Cap Set.....	24	18.00
" "A" 10" " " " " .....	24	18.50
" "A" 12" " " " " .....	24	19.00
" "A" 8" Oval " " " " .....	24	18.00
" "A" 10" " " " " .....	24	18.50
" "A" 12" " " " " .....	24	19.00
8x16" Pallets per hundred.....	24	25.50
10x16" " " " " .....	24	32.00
12x16" " " " " .....	24	38.50
8x24" " " " " .....	24	44.00
10x24" " " " " .....	24	52.00
12x24" " " " " .....	24	60.00

### COLUMN AND ORNAMENTAL MOLDS.

Only a limited number of Ornamental Molds are shown in this catalog. Ask for Catalog No. 19. Prices on pages 26, 38 and 39 are O. K.

IDEAL Sidewalk Mold .....	44	15.00
" Cement Sill Mold .....	44	20.00
" " Step " .....	44	25.00

TERMS AND DELIVERY: See page 7.

Our line is complete — Write for catalogs and quotations on Power Tampers, Brick Machines, Conveyors, Mixers, etc.





WE PRESENT FOR *YOUR* CONSIDERATION

*The* CONCRETE BUILDING BLOCK  
O F T H E F U T U R E

AS MADE ON THE

# ORIGINAL DOWN FACE IDEAL CONCRETE MACHINES

COMBINING STRENGTH . BEAUTY . ECONOMY AND SANITATION IN ITS HIGHEST  
DEGREE. ♪ FIREPROOF. ♪ WARM IN WINTER AND COOL IN SUMMER



This book is respectfully dedicated to Concrete Block Manufacturers and the Building Public

IDEAL CONCRETE MACHINERY CO., SOUTH BEND, INDIANA, U. S. A.  
IDEAL CONCRETE MACHINERY CO., Limited, LONDON, CANADA

**B**EFORE LOOKING OVER THIS CATALOG, we ask you, from the standpoint of your own interest to read our Book—

*“What Others Say About Us.”*

The unanimous expression of satisfaction of our customers, in this and other countries, must indicate to you the absolute superiority of

IDEAL CONCRETE MACHINES

And the statements herein shown, and such other claims as we make, will most certainly convince you of the wisdom of selecting—

AN IDEAL EQUIPMENT FOR YOUR USE.

We believe in a statement of actual fact.

Too many concrete block machine manufacturers have, unfortunately for the business, overstated the merits of their machines. Even cheap molds, and poorly designed machines of roughly assembled castings, are being exploited as the BEST, and the volume of production claimed, so excessive, as to approach the limits of pure fabrication. We therefore point with pride to the magnificent commendatory letters of satisfied customers, and to the simplicity and mechanical perfection of IDEAL MACHINES, as the basis for our solicitation of your patronage.

## OUR CLAIMS

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Are marvelously simple.

Are more rapid than all others.

Are mechanically perfect.

Will produce the greatest variety of blocks and designs.

Are labor economizers.

Are durable and substantial.

Are more universally used than all others combined.

Enable you to compete successfully without cutting your profits.

Have interchangeable parts, attachments and accessories.

Make blocks that are the best proportioned, accurate in measurement and beauty of design, and satisfy the Architect, Contractor and builder.

Make blocks face down—the ONLY WAY.

Are copied and infringed continually, which keep our attorneys busy.

Do not carry with them the possibility of loss to the purchaser by infringement suits.

Are portable and convenient.

Are not sold on approval.

MAKE CUSTOMERS who remain our friends.

Are sold under a positive guarantee.

Are positive in their lever action for removal of cores—a recognized advantage.

Are built to permit either hand or power tamping.

Are the only machines arranged to obtain fractional sized blocks in every inch size within capacity of machine, and all with proper marginal effect.

## NOTICE TO THE PUBLIC!!

**T**HERE are only **two types** of Hollow Concrete Block Machines---the **Down Face, Horizontal Core** being the latest and perfected type.

**Practical men** readily admit the superiority of the **Down Face Machine**.

The patents on the Side Face, Vertical Core type have expired.

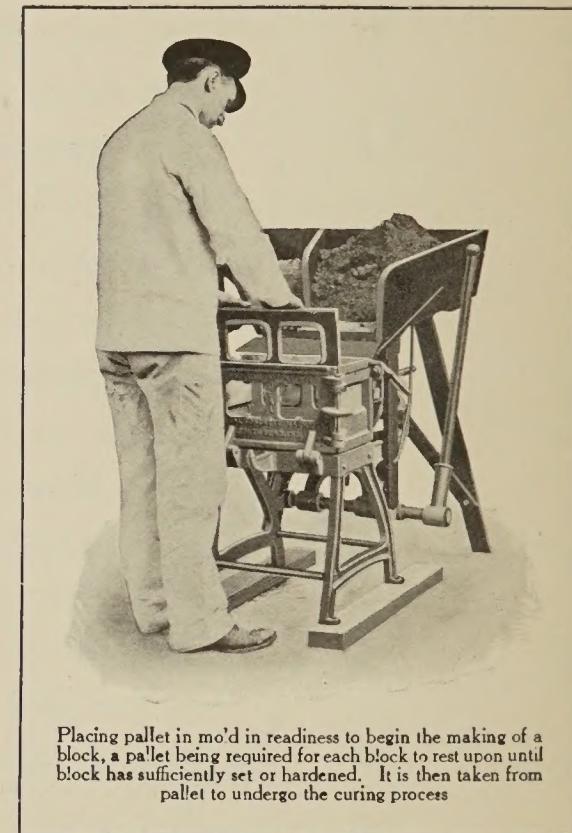
We **own** and **control** the fundamental **Patent** on the **Combination Down Face, Horizontal Core, Hollow Block Machines**.

We also own and control valuable Patents on Accessories and Improvements.

We caution the Buying Public against the purchase of **Infringing Machines**.

Cheap imitations are being offered at ridiculous prices, without regard to consequences to the **Purchaser**.

The courts have held that not only the **Manufacturer**, but also the **Seller** and **Purchaser** are liable. . . . We recently brought suit in Canada to protect our Patents, and the decision of the High Court of Justice unqualifiedly sustained them, and forever enjoined the parties, against whom suit was brought, from making or selling their machines. Suits now pending in the United States.



Placing pallet in mo'd in readiness to begin the making of a block, a pallet being required for each block to rest upon until block has sufficiently set or hardened. It is then taken from pallet to undergo the curing process

# THE DOWN FACE PRINCIPLE

— OF THE —

## ORIGINAL DOWN FACE IDEAL CONCRETE BLOCK MACHINE

MAKES IT POSSIBLE to produce a **Concrete Block** with a face richer in material than the balance of the block, thereby making it closer grained and more impervious to moisture. We accomplish this with the least possible cost to produce such results. In other words, if the whole block had to be made of the same rich mixture of cement, the cost of the block would be prohibitive, because of the percentage of cement used.

OUR SYSTEM OF FACING permits the balance of the block to be made of coarser material, costing less, yet securing the maximum strength at one-third the expense. We secure a face richer in appearance, clearer in design, greater in variety, and one with which artistic effects can be obtained.

To quote the exact words of a well-known cement authority: "The objects of facing are three:

FIRST—"Saving in cost and material.

SECOND—"Securing a beautiful surface.

THIRD—"Making the surface more dense and impervious."

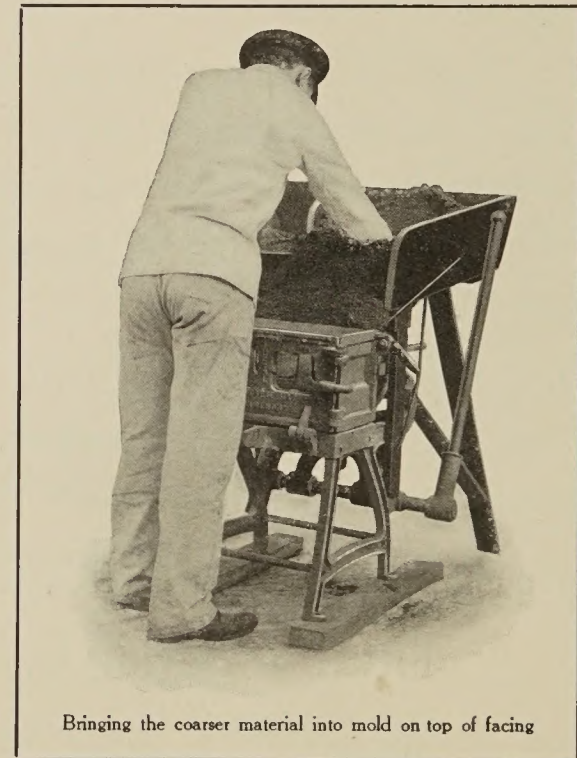
IDEAL Blocks overcome that sameness of appearance and dull look so many other blocks possess.

IDEAL Blocks make a dry, sanitary house—warm in winter and cool in summer.

## WE MANUFACTURE THE FOLLOWING HIGH GRADE "IDEAL" MACHINERY

IDEAL MODEL "A" 8" BLOCK MACHINE.  
IDEAL MODEL "A" 10" BLOCK MACHINE.  
IDEAL MODEL "A" 12" BLOCK MACHINE.  
IDEAL MODEL "E" 8" BLOCK MACHINE.  
IDEAL MODEL "E" 10" BLOCK MACHINE.  
IDEAL MODEL "E" 12" BLOCK MACHINE.  
IDEAL SPECIAL SILL AND LINTEL MACHINE.  
IDEAL CEMENT BRICK MACHINE.  
IDEAL VENEER BLOCK MACHINE.  
IDEAL CONTINUOUS BATCH MIXER, HAND POWER.  
IDEAL CONTINUOUS BATCH POWER MIXER.  
IDEAL BLOCK MACHINE FACE PLATES.  
IDEAL WATER TABLE SETS.  
IDEAL CIRCLE BLOCK SETS.  
IDEAL CHIMNEY BLOCK SETS.  
IDEAL ADJUSTABLE OCTAGON FACE PLATES.  
IDEAL SILL PLATES.  
IDEAL CAP PLATES.  
IDEAL FRACTIONAL FACE PLATES.  
IDEAL PALLETS, 8 x 16", 10 x 16", 12 x 16".  
IDEAL PALLETS, 8 x 24", 10 x 24", 12 x 24".  
IDEAL FRIEZE BLOCK SETS.  
IDEAL BELT COURSE SETS.  
IDEAL FENCE POST MOLDS.  
IDEAL SILO BLOCK SETS.  
IDEAL ATTACHMENTS FOR BLOCK MACHINES.  
IDEAL ACCESSORIES FOR CEMENT USERS.  
IDEAL MATERIAL FEED TABLES.  
IDEAL BLOCK CARRIERS, WOOD.  
IDEAL BLOCK CARRIERS, IRON.  
IDEAL SMOOTHING AND COMPRESSION TOOL.  
IDEAL IRON BLOCK MACHINE TAMP.  
IDEAL CONCRETE TAMP.  
IDEAL BRICK MACHINE TAMP.

IDEAL BRICK MACHINE ROCKER.  
IDEAL CEMETERY CORNER MOLDS.  
IDEAL SPINDLE MOLDS.  
IDEAL BALL MOLDS.  
IDEAL COLUMN MOLDS.  
IDEAL CAPITAL MOLDS.



Bringing the coarser material into mold on top of facing

IDEAL PIER MOLDS.  
IDEAL PORCH PIER MOLDS.  
IDEAL PIER CAP MOLDS.  
IDEAL STEEL BLOCK BINDER.  
IDEAL ASHLAR FACE PLATES.  
IDEAL DIVIDING PLATES & GUIDE.

## TERMS AND DELIVERY

### TERMS

If Cash accompanies orders—less 5 per cent discount.

If C. O. D. or Sight Draft with Bill of Lading—less 3 per cent discount, and satisfactory references must be furnished.

If 60 days net or less, 3 per cent discount in 15 days; parties must be satisfactorily rated or furnish indisputable evidence of responsibility.

If Special Terms are desired, by parties not regularly rated, we require one-third (1-3) cash with order, and will accept one or two Notes for equal amounts, with Interest at 6 per cent per annum, and secured by our Regular Machine Contract for the remaining two-thirds (2-3) of the order. References must be satisfactory in all cases where Special Terms are desired and should accompany order to save delay.

### FOREIGN TERMS

Cash must accompany orders, or satisfactory arrangements made with some reliable Bank to honor draft with documents attached. If other terms are desired, they should be specified and satisfactory evidence of responsibility should accompany order.

### REMITTANCES

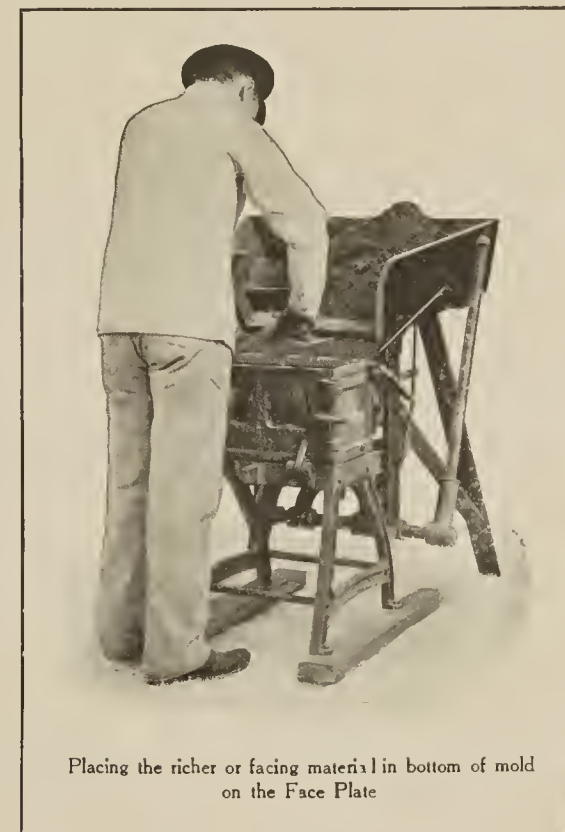
Should be by New York or Chicago Drafts, London Exchange, Express or Money Orders, Certified Checks or Registered Letter.

### DELIVERY

All goods are sold F. O. B. cars South Bend, Indiana, or London, Canada. No charge for Crating, Boxing or Packing.

### OUR REFERENCES

R. G. Dun & Co., The Bradstreet Co., or any Bank or Business Concern in South Bend, Indiana, or London, Canada.



# GUARANTY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned, the IDEAL CONCRETE MACHINERY COMPANY, guarantees, first, generally, that the IDEAL CONCRETE BLOCK MACHINES, manufactured and sold by them, are free from all latent defects, and made of the best obtainable materials, and that the same are structurally perfect and mechanically correct, strong and durable, and it now agrees that it will replace any part or parts of any IDEAL BLOCK MACHINE, in case the same does not fill the terms of this general guaranty, upon notice to it and proof of the defects herein guaranteed against, but this guaranty and promise shall not apply to natural wear and tear, nor to defects arising therefrom, nor from unskillful and improper use; and we guarantee that the patents covering our machine are owned and controlled by us, and cover the principle of the Combination Down Face Horizontal Core Block Machine.



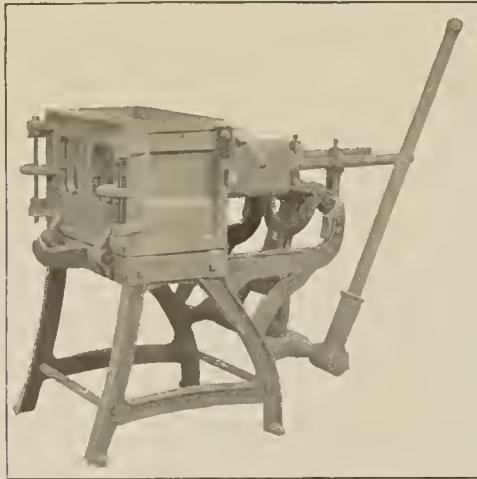
WITNESS the name and corporate seal of the  
IDEAL CONCRETE MACHINERY COMPANY,  
at South Bend, Indiana, this 21st.  
day of February, 1907.

IDEAL CONCRETE MACHINERY COMPANY,

*M. W. Wetzel* *E. R. Puffer* *Augustine Smith*  
\_\_\_\_\_  
President. Vice Pres. & Gen. Mgr. Secretary.

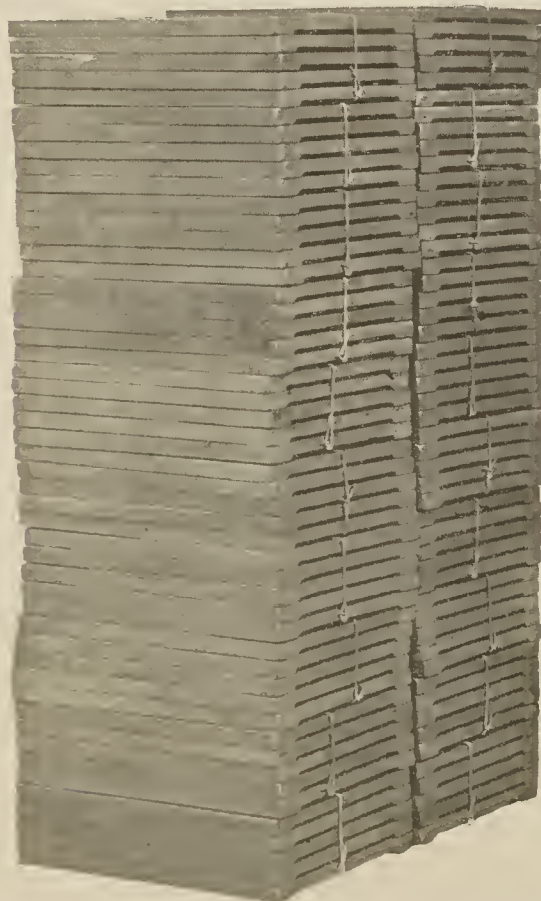
The only definite, specific and binding guaranty furnished by any Block Machine  
Manufacturing Company





## OUTFIT No. 2

Ideal Model "A" 8x10x16 inch Machine  
complete



Ideal Model "A" 8x10x16 inch Machine, complete with 100 Pallets and equipment to make Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Half and Quarter Blocks, Etc., Etc.      Gross weight, 1462 lbs.      **\$135.00**

The Base of this machine is adapted to receive the Attachments for producing either the 8x8x16 inch or 8x12x16 inch Blocks.      **No change in face plate** necessary in the making of these various widths.

Extra Pallets 10x16 inch, 30c each

IDEAL CONCRETE MACHINERY CO., SOUTH BEND, IND., U. S. A.

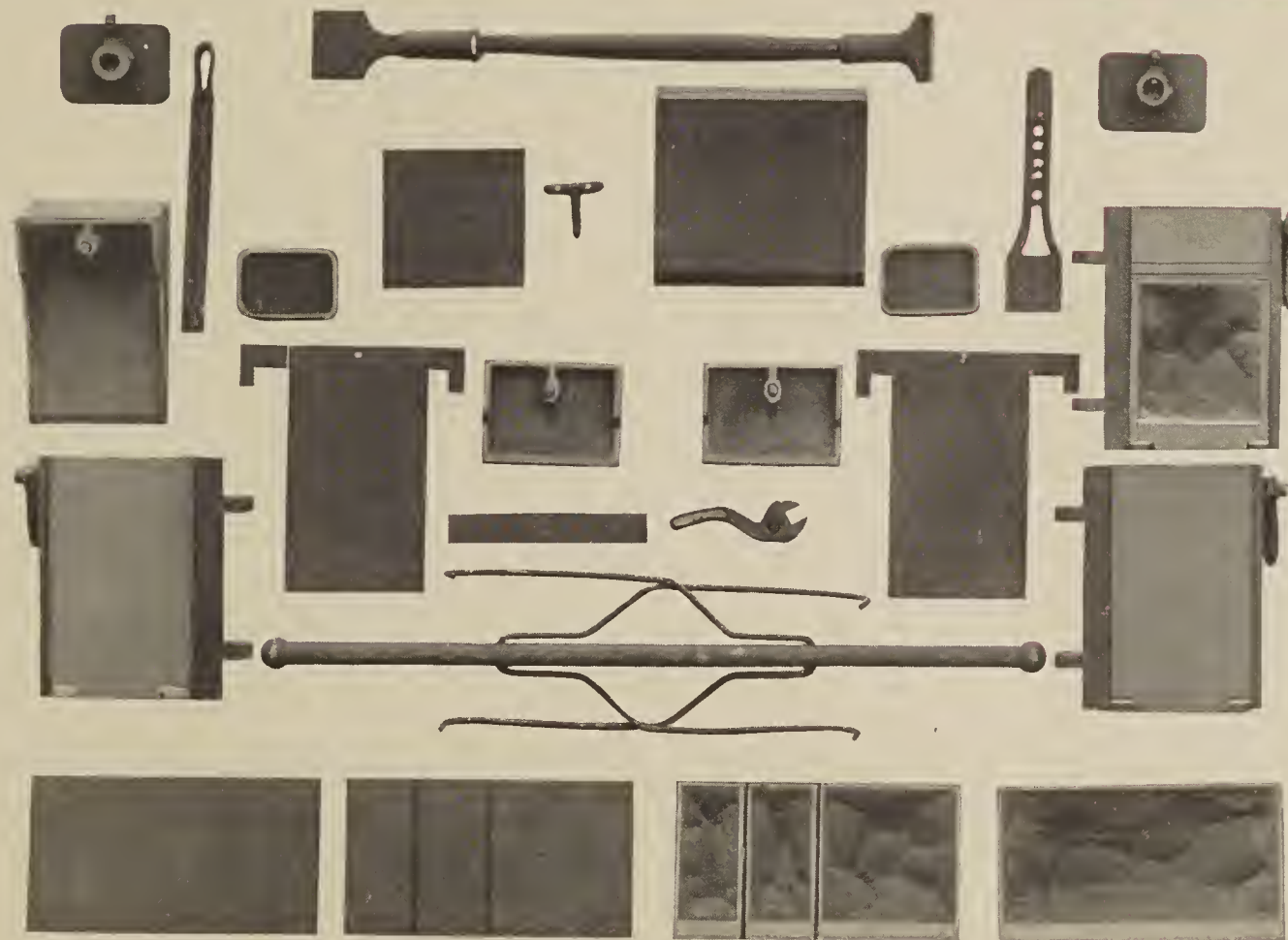
In Ordering  
Always Refer to

IDEAL CONCRETE MACHINERY CO., Limited, LONDON, CANADA

OUTFIT No. 3

Ideal Model "A" 8x12x16 inch Machine  
complete

Current Price  
List Inside  
Front Cover



Ideal Model "A" 8x12x16 inch Machine, complete with 100 Pallets and equipment to make Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Half and Quarter Blocks, Etc.

Gross weight, 1575 lbs. **\$145.00**

The Base of this machine is adapted to receive the Attachment for producing 8x8x16 inch or 8x10x16 inch Blocks. **No change in face plate** necessary in the making of these widths.

Extra Pallets, 12x16 n., 35c each

MODEL "A" ACCESSORIES AND ATTACHMENTS



The base of the Model "A" Machine is adapted to receive the following:

Model "A" 8x4x16 inch Solid Veneer Block Attachment for Plain and Rock Face Blocks.	Net weight, 65 lbs.	\$20.00
Model "A" 4x8x16 inch Hollow Course Block Attachment for Plain and Rock Face Blocks.	Net weight, 55 lbs.	\$13.00
Model "A" 4x10x16 inch Hollow Course Block Attachment for Plain and Rock Face Blocks.	Net weight, 60 lbs.	\$12.75
Model "A" 4x12x16 inch Hollow Course Block Attachment for Plain and Rock Face Blocks.	Net weight, 65 lbs.	\$13.50
Model "A" 8 inch Chimney Block Attachment for making Blocks with 5x10 inch opening.	Net weight, 35 lbs.	\$5.00
Model "A" 8 inch, 10 inch or 12 inch Ideal Feed Table, for holding and separating facing and backing material.	Net weight, 55 lbs.	\$5.00
Model "A" 8 inch, 10 inch or 12 inch Window Block and Sash Weight Attachment.	Net weight, 10 lbs.	\$1.00
Model "A" 4 inch Course Window Block and Sash Weight Attachment.	Net weight, 5 lbs.	\$1.00

## MODEL "A" ACCESSORIES AND ATTACHMENTS

The base of the Model "A" Machine is adapted to receive the following:

Model "A" 8x8x16 inch Attachment, complete for Plain and Rock Face Blocks,  
Corner Blocks, Pier Blocks, Joist Blocks, Half and Quarter Blocks, Etc., Etc.  
Net weight, 125 lbs. **\$35.00**

Model "A" 8x10x16 inch Attachment, complete for Plain and Rock Face Blocks,  
Corner Blocks, Joist Blocks, Half and Quarter Blocks, Etc.  
Net weight, 150 lbs. **\$40.00**

Model "A" 8x12x16 inch Attachment, complete for Plain and Rock Face  
Blocks, Corner Blocks, Joist Blocks, Half and Quarter Blocks, Etc.  
Net weight, 210 lbs. **\$45.00**

Model "A" Water Table Set, with parts for making Return Corners.  
Net weight, 40 lbs. **\$5.00**  
(Specify if 8 inch, 10 inch or 12 inch are wanted)

Model "A" Circle Block Sets, with End Angles and Inner Circle Scraper; in 5 foot, 7 foot or 9 foot radius.  
Net weight, 25 lbs. **\$4.00**  
(Can be had in any face design desired)

Model "A" Adjustable Octagon Face Plates in any Face design. 20° to 80° angles. Net weight, 25 lbs. **\$5.00**





More material having been placed in mold, the operator now reverses the tamping bar & with blade end proceeds to tamp material around the cores which forms the end and center shells or webs

## MODEL "A" END DOORS

Machines are regularly equipped with Standard, Plain and Rock Doors. They can also be had in any of the following designs:

Right and Left Doors in 8 inch size. Also in Standard and Plain 10 inch and 12 inch Left Doors only in balance of 10 inch and 12 inch Doors.

Panel, Corrugated, Cobble, Rock with Tool Margin; Bush Hammered with Tool Margin, Bush Hammered, Broken Ashler and Pilaster.

Price on all Model "A" 8 inch Doors	.	.	.	Net weight, 11 lbs.	<b>\$2.00</b>
Price on all Model "A" 10 inch Doors	.	.	.	Net weight, 13 lbs.	<b>2.25</b>
Price on all Model "A" 12 inch Doors	.	.	.	Net weight, 16 lbs.	<b>2.50</b>

## MODEL "A" 8x16 INCH FACE PLATES

Machines are regularly equipped with Plain and Rock Face Plates. They can also be had in any of the following designs:

Panel, Corrugated, Cobble, Rock with Tool Margin, Bush Hammered with Tool Margin, Bush Hammered, and Broken Ashler. Any 8x16 inch Face Plate fits the Model "A" Machines, and may be had in any fractional division of 16 inch. All showing proper margin effect. . . . . Average net weight, 16 lbs. Price of each **\$3.00**

ORDNANCE DEPARTMENT, U. S. A.

## REPORT OF MECHANICAL TESTS

MADE WITH THE

### U. S. TESTING MACHINE

CAPACITY 800,000 POUNDS

AT

WATERTOWN ARSENAL, MASS.

October 26, 1906.

FOR

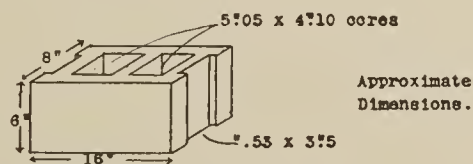
E. R. Taylor Company,

Boston, Mass.

EXTRACT FROM REPORT OF  
TESTS BY COMPRESSION

Building Blocks.

Extract from Test No. 13,465.



Marks.	First crack.	Ultimate strength.
	Pounds.	Pounds.
22 days 1 : 2 : 3	187,000	187,000
do	209,000	209,700

Correct,  
*J. C. Howard.*

*J. C. Howard*  
Major, Ord. Dept., U. S. A.,

Commanding.

The E. R. Taylor Co. for whom above test was made are customers and users of our Ideal machines.

## TEST OF BLOCKS MADE AT THE PENNSYLVANIA RAIL ROAD SHOPS AT FORT WAYNE, IND., ON THEIR HYDRAULIC PRESS.

### No. 1—CRUSHED AT 60 TONS PRESSURE

This block was made about August 1, 1904; contained 80 square inches of surface; was frozen in solid ice for a period of nine days, and has been drying since December 1st; size, 8x8x16 inches.

### No. 2—CRUSHED AT 36 TONS PRESSURE

This block was made about October 15, 1904; contained 80 square inches of surface; has lain in the yard the entire winter subject to all the weather conditions; size, 8x8x16 inches.

### No. 3—CRUSHED AT 30 TONS PRESSURE

This block was made about October 15, 1904; contained 80 square inches of surface; has lain in the yard the entire winter subject to all the weather conditions; size, 8x8x16 inches.

### No. 4—CRUSHED AT 34 TONS PRESSURE

This block was made about November 20, 1904; contained 88 square inches of surface; has lain in the yard the entire winter subject to all the weather conditions; size, 8x8x16 inches.

### No. 5—DID NOT CRUSH

This block, 8x10x20 inches, was made about August 15, 1904; contained 152 square inches of surface; has lain in the yard the entire winter subject to all the weather conditions. Upon this block a pressure of 60 tons was exerted, without effect. A second pressure of 60 tons caused a slight crack to appear in the same.

On the blocks that were crushed, no part of the facing scaled or came off separately; in fact the facing, which by the Borst System is an integral part of the block itself, adhered to the parts of the crushed blocks. That you may have full proof of this, we send you specimens.

Our blocks are produced by using a 2 and 1 proportion for the facing, and a 4 and 1 proportion for the backing. . . Hoping you are pleased with the results we obtained, we are

Very truly yours,

THE MENEFFEE ARIFICIAL STONE CO.  
C. M. MENEFFEE.

P. S.—This shows that the test made on the small block designated as No. 1 would stand a pressure in a wall equal in height to 1,600 feet, or equal to a building 133 stories high, each story 12 feet. We do not think however, that the Building Inspector in our city would give us permit to erect one of that height.

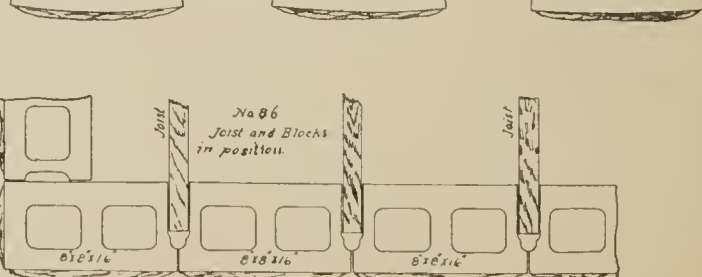
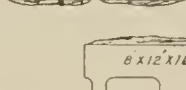
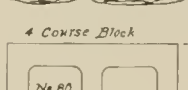
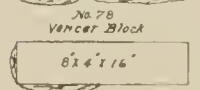
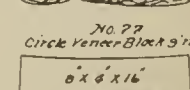
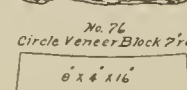
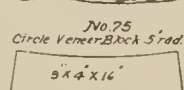
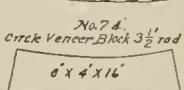
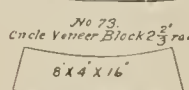
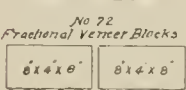
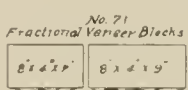
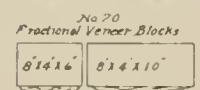
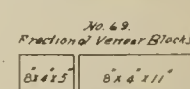
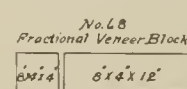
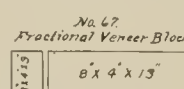
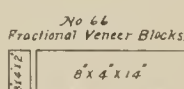
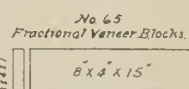
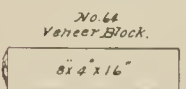
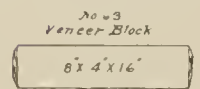
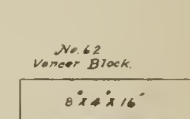
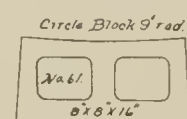
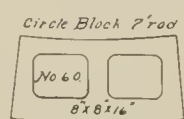
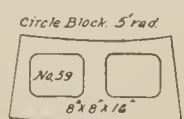
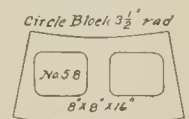
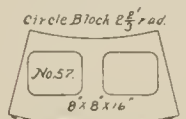
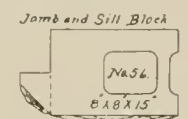
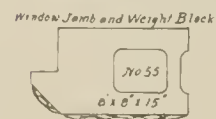
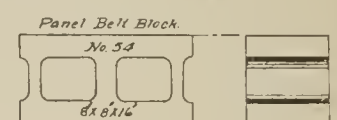
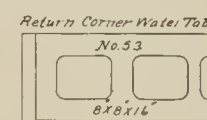
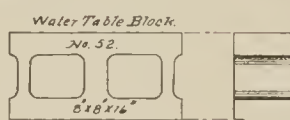
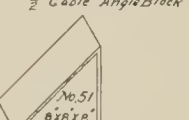
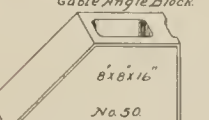
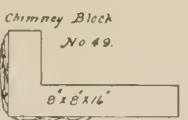
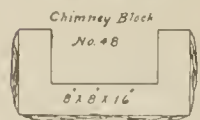
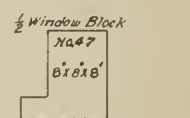
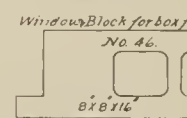
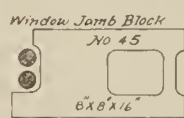
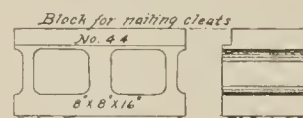
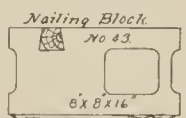
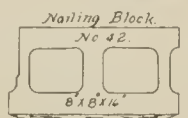
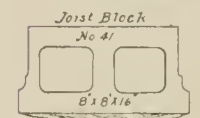
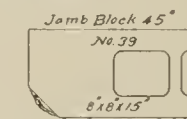
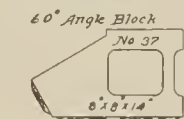
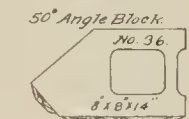
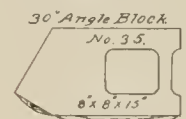
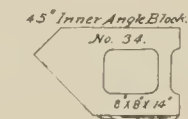
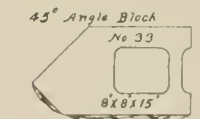
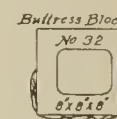
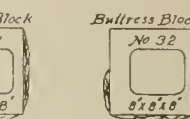
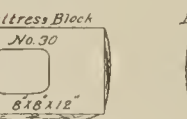
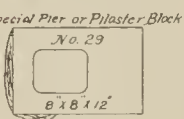
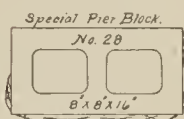
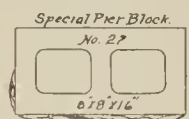
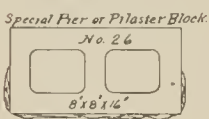
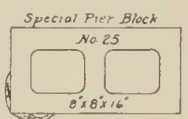
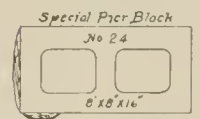
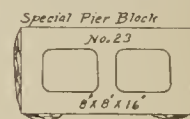
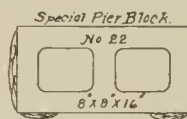
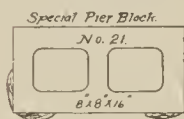
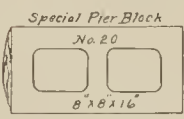
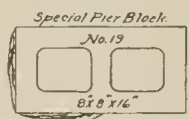
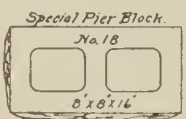
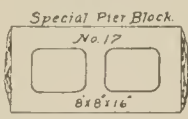
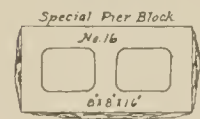
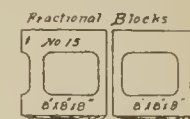
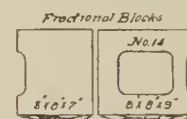
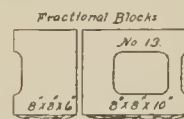
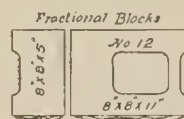
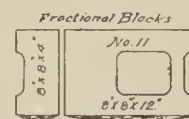
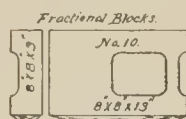
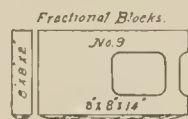
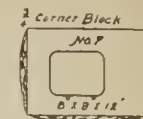
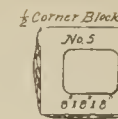
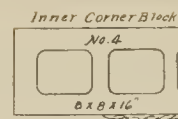
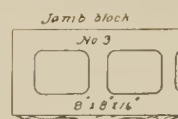
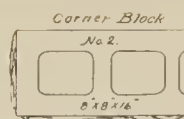
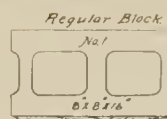
# VARIOUS SHAPE BLOCKS

As produced on the,

IDEAL HOLLOW CONCRETE BLOCK MACHINE.

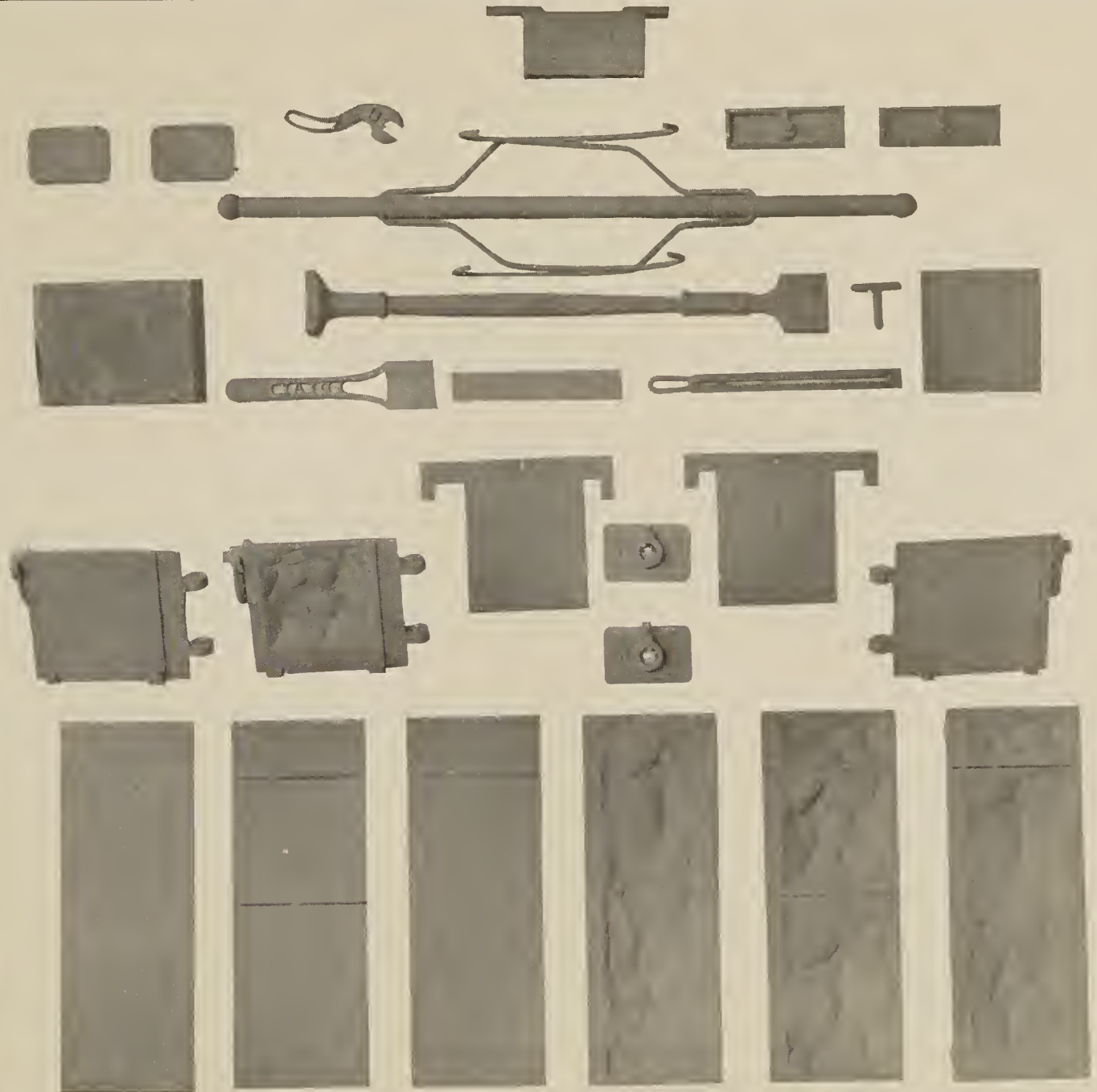
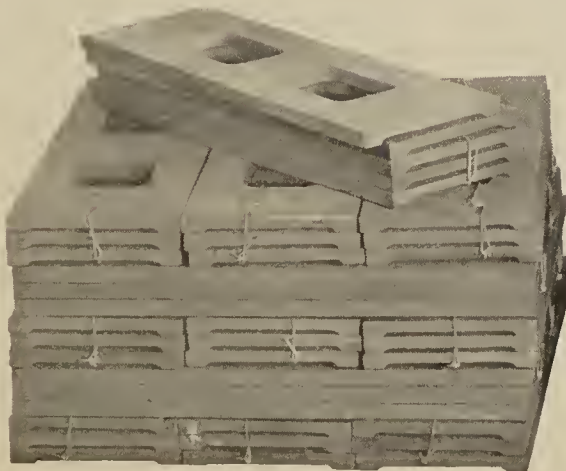
IDEAL CONCRETE MACHINERY CO.

SOUTH BEND IND.



## OUTFIT No. 4

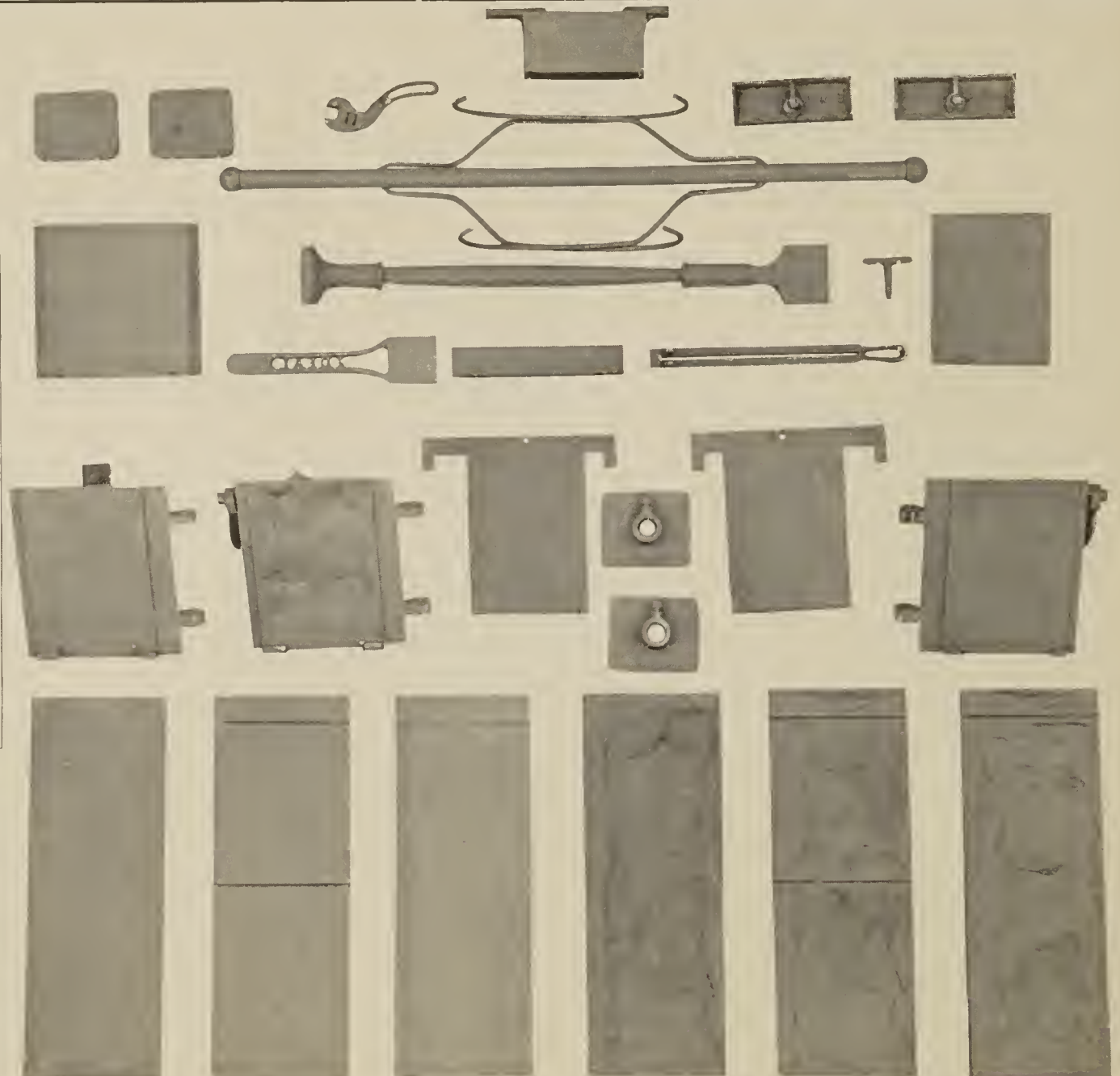
Ideal Model "E" 8x8x24 inch  
Machine Complete.



Ideal Model "E" 8x8x24 inch Machine complete with 50 Pallets and equipment to make Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Fractional Blocks, etc. Gross weight 1375 lbs. **\$170.00**  
The Base of this Machine is adapted to receive the attachment for producing either the 8x10x24 inch or 8x12x24 inch block. **No change in face plate** necessary in the making of these various widths.

## OUTFIT No. 5

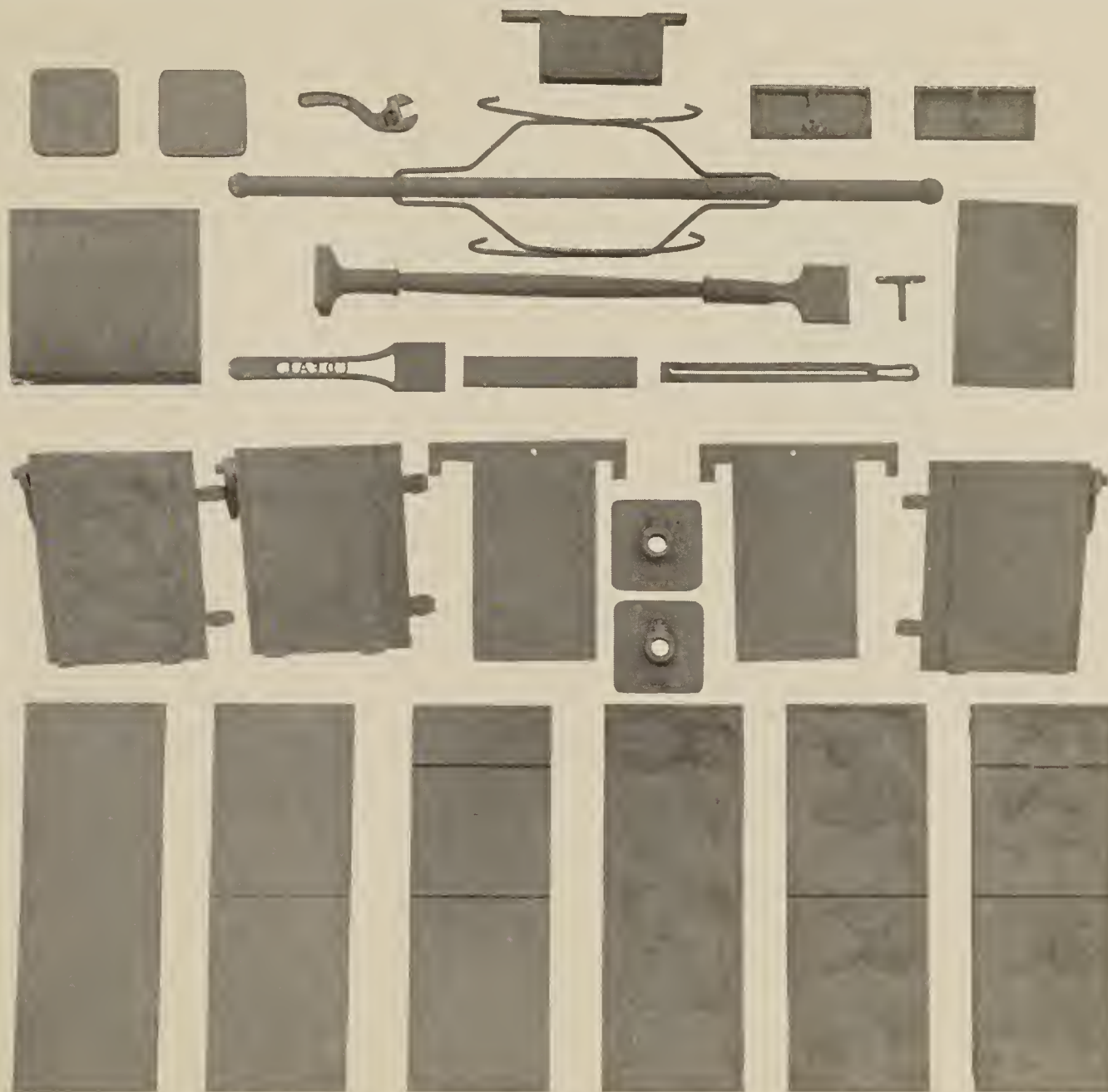
Ideal Model "E" 8x10x24 inch  
Machine Complete



Ideal Model "E" 8x10x24 inch Machine complete with 50 Pallets and equipment to make Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Fractional Blocks, etc. Gross weight 1525 lbs. **\$180.00**  
The Base of this Machine is adapted to receive the attachment for producing either the 8x8x24 inch or 8x12x24 inch block. **No change in face plate** necessary in the making of these various widths.

## OUTFIT No. 6

Ideal Model "E" 8x12x24 inch  
Machine Complete.



Ideal Model "E" 8x12x24 inch Machine complete with 50 Pallets and equipment to make Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Fractional Blocks. etc. Gross weight 1700 lbs. **\$190.00**  
The Base of this Machine is adapted to receive the attachment for producing either the 8x8x24 inch or 8x10x24 inch block. **No change in face plate** necessary in the making of these various widths.  
19 Extra Pallets 12x24 inch 65c each.

## MODEL "E" ACCESSORIES AND ATTACHMENTS

The base of the Model "E" Machine is adapted to receive the following:

Model "E" 8x8x24 inch Attachment, complete for Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Fractional Blocks.    Net weight, 300 lbs.    **\$70.00**

Model "E" 8x10x24 inch Attachment, complete for Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Fractional Blocks.    Net weight, 320 lbs.    **\$75.00**

Model "E" 8x12x24 inch Attachment, complete for Plain and Rock Face Blocks, Corner Blocks, Joist Blocks, Fractional Blocks.    Net weight, 300 lbs.    **\$75.00**

Model "E" Water Table Sets, with parts for making Return Corners.    Net weight, 55 lbs.    **\$7.00**

(Specify if 8 inch, 10 inch or 12 inch are wanted)

Model "E" Circle Block Sets, with End Angles and Inner Circle Scraper, in 7 foot and 9 foot radius.    Net weight, 30 lbs.    **\$5.00**  
(Can be had in any Face design desired)

Model "E" Adjustable Octagon Face Plates in any Face design, 20° to 80° angles.    Net weight, 30 lbs.    **\$7.00**

## MODEL "A" FANCY BELT COURSE SETS

Panel Belt Course Sets, 8 inch	\$ 4.00	Oval Belt Course Sets, 10 inch	\$ 11.25
" " " " 10 "	\$ 4.00	" " " " 12 "	\$ 11.00
" " " " 12 "	\$ 4.00		
Oval Belt Course Sets 8 inch	\$ 11.00	Daisy Belt Course Sets, 8 inch	\$ 11.00
		" " " " 10 "	\$ 11.25
Daisy Belt Course Sets, 12 inch	\$ 11.50		



After having again placed more material heaping full in mold the operator uses the square end of the tamp and finishes block, he is now removing the surplus material, known as "Striking off"—this part of block exposed being the back can be smoothed by use of trowel, if desired.

## MODEL "E" ACCESSORIES AND ATTACHMENTS

The base of the Model "E" Machine is adapted to receive the following:

Model "E" 8x4x24 inch Solid Veneer Block Attachment for Plain and Rock Face Blocks.	Net Weight 100 lbs.	\$25.00
Model "E" 4x8x24 inch Hollow Course Block Attachment for Plain and Rock Face Blocks.	Net Weight 90 lbs.	\$14.00
Model "E" 4x10x24 inch Hollow Course Block Attachment for Plain and Rock Face Blocks.	Net Weight 100 lbs.	\$15.00
Model "E" 4x12x24 inch Hollow Course Block Attachment for Plain and Rock Face Blocks.	Net Weight 110 lbs.	\$16.00

**In Ordering  
Always Refer to  
Current Price  
List Inside  
Front Cover**



Window Jamb and Sash Weight Attachment for 8" high blocks,  
used as cut out

Model "E" 8 inch Window Block and Sash Weight Attachment.	\$1.00
" " 10 " " " " " " " "	\$1.00
" " 12 " " " " " " " "	\$1.00
" " 8—4 inch Course Window Block and Sash Weight Attachment.	\$1.00
" " 10—4 " " " " " " " "	\$1.00
" " 12—4 " " " " " " " "	\$1.00



## MODEL "E" END DOORS

Machines are regularly equipped with Standard, Plain and Rock Doors. They can also be had in any of the following designs:

Right and Left Doors in Standard and Plain---others Right Doors only.

Panel, Corrugated, Cobble, Rock with Tool Margin, Bush Hammered with Tool Margin, Bush Hammered, Broken Ashler and Pilaster.

Price on all Model "E" 8 inch Doors.	.	.	Net weight, 11 lbs.	<b>\$2.00</b>
Price on all Model "E" 10 inch Doors.	.	.	Net weight, 13 lbs.	<b>2.25</b>
Price on all Model "E" 12 inch Doors.	.	.	Net weight, 16 lbs.	<b>2.50</b>

## MODEL "E" 8x24 INCH FACE PLATES

Machines are regularly equipped with Plain and Rock Face Plates. They can also be had in any of the following designs:

Panel, Corrugated, Cobble, Rock with Tool Margin, Bush Hammered with Tool Margin, Bush Hammered, and Broken Ashler. Any 8x24 inch Face Plate fits the Model "E" Machines, and may be had in fractional plates. Average net weight, 30 lbs.	Price of each	<b>\$4.00</b>
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## IDEAL MODEL "A" CEMENT BRICK MACHINE

FOR MAKING BRICKS  $2\frac{1}{8} \times 3\frac{7}{8} \times 8$  INCH

Complete with Base and Plain End and Face Plates.

Brick Attachment to fit the Base of Model "A" Block Machine—for making Plain Face Brick.

Combination End Face and Pallet in Rock, Panel or Fancy Design.

Bottom Face Plates in Rock Panel or Fancy Design.

Combination Set above Two Plates

Net Weight 230 lbs. \$90.00

Net Weight 120 lbs. \$45.00

Each \$3.00

Each \$4.00

Each \$7.00

**In Ordering  
Always Refer to  
Current Price  
List Inside  
Front Cover**



He has let down the right door and is doing the same with the left, and also aids in releasing the face plate from the face of the block, the face plate tilting away from block at a very slight angle. In the entire operation of making the block from the start to finish he scarcely changes his position or leaves his tracks.



Rocker



With Pallet & End  
Plate in Position



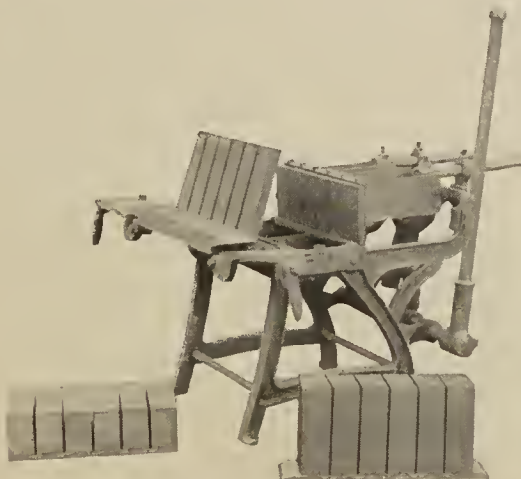
Rocked to Position



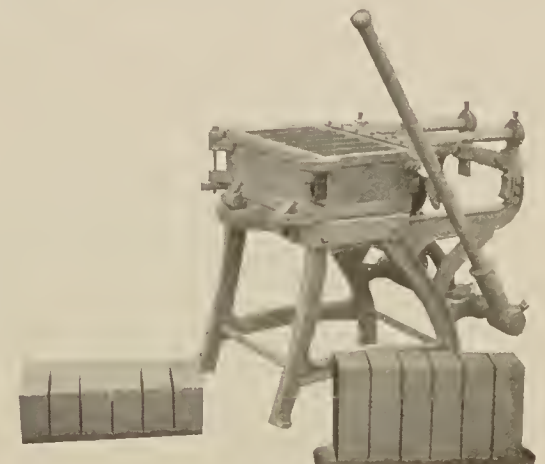
Rocked to Position  
with rick

The "Rocker" supplied with the Machine or Attachment provides for immediate transfer of Brick to an Iron or Wooden Pallet. Our Regular Block Machine Pallets can be used.

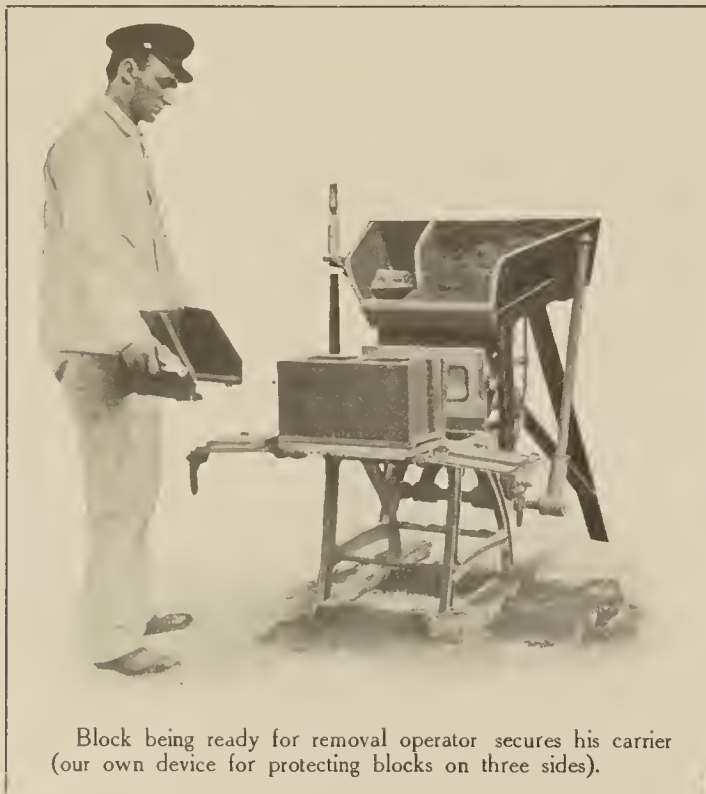
The only Brick Machine on the market producing full size bricks with ornamental or fancy ends—our designs being on the combination end and pallet.—No time lost by inserting pieces to get ornamental effect and cutting down size of brick.



Ideal Cement Brick Machine—Open



Ideal Cement Brick Machine—Closed



## SILL AND CAP FACE PLATES

In Plain, Rock, Corrugated, Rock with Tool Margin, Bush Hammered with Tool Margin and Bush Hammered.

Sill 4x36 inch size	.	.	.	.	Net weight 24 lbs.	<b>\$2.00</b>
Sill 5x48 inch size	.	.	.	.	Net weight 37 lbs.	<b>\$3.50</b>
Cap 8x48 inch size	.	.	.	.	Net weight 65 lbs.	<b>\$5.00</b>

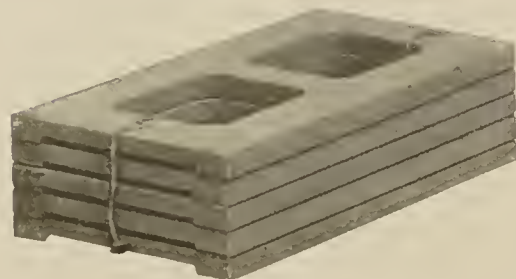
## MODEL "A" FANCY CAPS

Ornamental Loop Cap Sets	8 inch	.	.	.	.	<b>\$18.00</b>
"	"	"	"	10	"	<b>\$18.50</b>
"	"	"	"	12	"	<b>\$19.00</b>
Ornamental Oval Cap Sets	8 inch	.	.	.	.	<b>\$18.00</b>
"	"	"	"	10	"	<b>\$18.50</b>
"	"	"	"	12	"	<b>\$19.00</b>

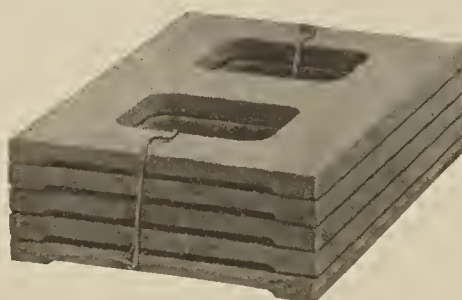
## CAST IRON PALLETS

The kind that last forever making them the cheapest in the end

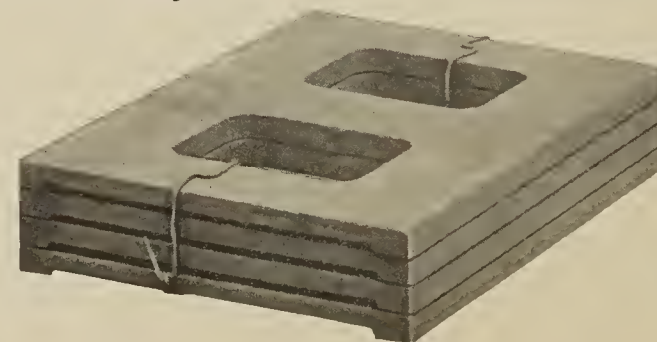
Model "A" 8x16 inch	.	Price per 100—	<b>\$25.00</b>	Model "E" 8x24 inch	.	Price per 100—	<b>\$55.00</b>
" " 10x16 inch	Net Weight 700 lbs.	"	" 100—	" " 10x24 inch	Net Weight 1200 lbs.	"	" 100—
" " 12x16 inch	Net Weight 1000 lbs.	"	" 100—	" " 12x24 inch	Net Weight 1500 lbs.	"	" 100—
	Net Weight 1075 lbs.	"	" 100—		Net Weight 1800 lbs.	"	" 100—
			<b>\$35.00</b>				<b>\$65.00</b>



8x16" Iron Pallets



10x16" Iron Pallets



12x16" Iron Pallets

The kind that last forever, making them the cheapest in the end

THESE four blocks show an exact photographic reproduction of our new rock faces---nothing so perfect and natural in rock effect has ever been shown---and they are distinctively **"Ideal"** products. Such sharp and clear-cut outline is only possible with **"Ideal"** Face Plates used in **"Ideal"** Machines by our combination down face horizontal core principle.

At the National Meeting of Cement Users, in Chicago, we displayed the plates and blocks showing these rock faces, and one of the highest authorities in cement and its uses, called at our display to personally congratulate us, as he expressed it, on "The finest rock designs he had ever seen."

Architects and the building public have discouraged in the past the use of rock face designs in blocks, and it was only natural that they took this stand, since builders persisted in building a wall with but one design of rock face, and it was like a checker-board---no matter which way the eye was cast along such a wall, there was a sameness at right or left angles, whether up, down or crosswise---always that awful monotony. But with our new faces we have solved the problem for the builder using blocks, with these four face designs, and also reversing them, show a variety of eight patterns, and used promiscuously in building up a wall you secure a result so natural and perfect that even the trained eye cannot detect such construction from the prohibitively expensive rock hewn work; and when you take into further consideration the great and prolific possibilities of block production on an **"Ideal,"** and use in the building up of a wall, in conjunction with the 8 inch high blocks the 4 inch high course blocks of the many designs that can be produced on the machine, and then vary a wall by their use in every other second or third course in conjunction with these rock faces, there is obtained artistic effect that cannot help but catch the eye of the building public.





He is placing carrier in position ready to lift block and pallet

### COLUMN MOLD—FLUTED

6 foot shaft—9 inch Diameter at Top, 10 $\frac{3}{4}$  inch Diameter at Bottom, including Core and 5 inch High Base and Doric and Ionic Capitals. . . . . Complete. Net Weight 460 lbs. **\$75.50**

### SPINDLE MOLDS

Round and Square 5 inch Square at Base and Top, 16 inches High.	.	.	30 lbs.	<b>\$8.00</b>
5 " " 5 " " 18 " "	.	.	33 "	<b>\$8.00</b>

### BALL MOLDS

6 inch Diameter, 8x 8 inch Base.	.	.	Weight 30 lbs.	<b>\$10.00</b>
9 " " 12x12 " "	.	.	" 52 "	<b>\$14.00</b>
12 " " 16x16 " "	.	.	" 86 "	<b>\$16.00</b>
15 " " 18x18 " "	.	.	" 140 "	<b>\$25.00</b>

### PIER COPING—ROCK FACE

5 inch High, 18x18 inch Square. . . . . Net Weight 70 lbs. **\$14 00**

### PORCH COLUMN BLOCK MOLDS

#### ROCK FACE

8 inch High, 16x16 inch Square	.	.	Weight 80 lbs.	<b>\$12.50</b>
8 " " 14x14 " "	.	.	" 75 "	<b>\$12.50</b>
8 " " 12x12 " "	.	.	" 70 "	<b>\$11.50</b>

For 4 inch Courses—4 inch High, 16x 16 inch Square. Weight 50 lbs. **\$10.00**

For 4 inch Courses—4 inch High, 14x 14 inch Square. Weight 45 lbs. **\$ 9.50**

For 4 inch Courses—4 inch High, 12x 12 inch Square. Weight 40 lbs. **\$ 9.00**

### PORCH COLUMN BLOCK MOLDS --FLUTED CORNERS

Rock Face 8 inch high, 12x12 inch square  
. . . . . Weight 100 lbs. **\$13.00**

Rock Face, 4 inch high, 12x12 inch square  
. . . . . Weight 50 lbs. **\$10.00**

Rock Face, 8 inch high, 8x8 inch square  
. . . . . Weight 90 lbs. **\$10.50**

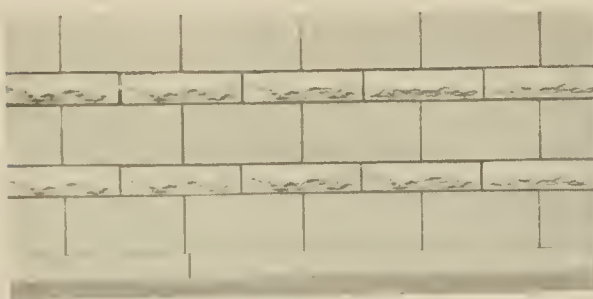
Rock Face, 4 inch high, 8x8 inch square  
. . . . . Weight 35 lbs. **\$ 7.75**



Porch Pier Block Mold showing front plate removed and fluted corners in position for moulding top and bottom blocks. The fluted fillets on the sides are those used for the regular blocks between the top and bottom blocks.



Porch Pier Columns of various designs and construction, as built entirely from blocks produced on the "Ideal" Hollow Concrete Block Machine. Photographed from sample piers as shown in an up to date Block yard in South Bend, Ind., where a number of Ideal Machines are in continuous operation.



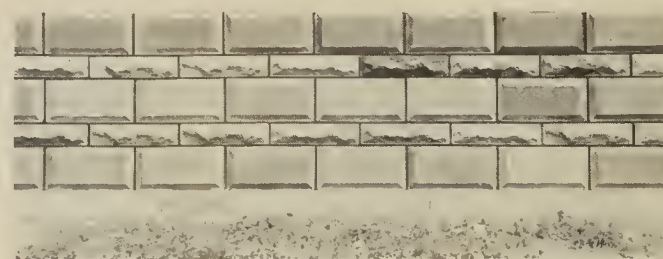
8 inch Plain Blocks with 4 inch High Rock Courses



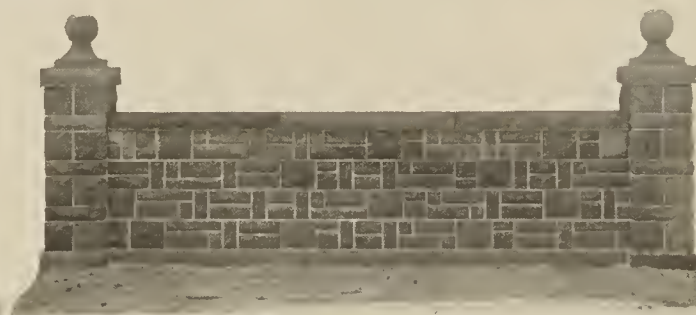
8 in. High Rock Blocks alternating with 4 in. High Plain Course Blocks



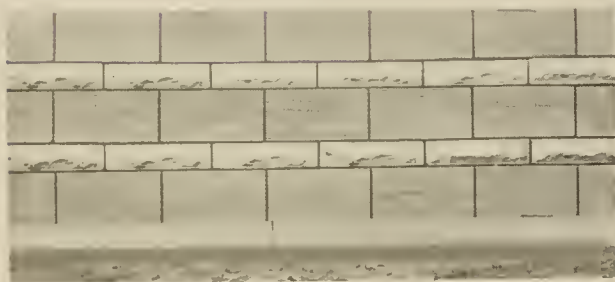
Octagon Wall—8 inch and 4 inch Blocks used



Panel 8 inch alternating with 4 inch Rock



Broken Ashler



Corrugated 8 inch alternated with 4 inch Rock Course



Panel Blocks

Cuts made from photographs of sample walls to show contractors and intending builders as laid up in a modern and up to date concrete block yard in South Bend, Indiana. Here is a good pointer for the block seller to also erect these sample walls. These also show a few of the many possibilities of our "Ideal" Hollow Concrete Block Machine.

## DATA REGARDING "IDEAL" CONCRETE BLOCKS.

KIND OF BLOCK.	SIZE WITH MORTAR JOINTS	NET SIZE OF BLOCKS	NET WEIGHT IN LBS.	CUBIC INCH OVER ALL.	CUBIC INCH MATERIAL.	CUBIC INCH OF VOIDS.	PERCENT OF VOIDS	DISPLACEMENT OF BRICK.
HOLLOW	8 x 8 x 16 in.	7 $\frac{3}{4}$ x 8 x 15 $\frac{3}{4}$ in.	50	976.	658.	318.	32.58.	14.22
HOLLOW	8 x 10 x 16 in.	7 $\frac{3}{4}$ x 10 x 15 $\frac{3}{4}$ in.	68	1220.6	882.48	337.12	27.61	17.77
HOLLOW	8 x 12 x 16 in.	7 $\frac{3}{4}$ x 12 x 15 $\frac{3}{4}$ in.	82	1464.7	1057.83	406.87	27.77	21.33
HOLLOW 4 IN. COURSE	4 x 8 x 16 in.	3 $\frac{3}{4}$ x 8 x 15 $\frac{3}{4}$ in.	25	472.50	318.64	153.86	32.58	7.11
HOLLOW 4 IN. COURSE	4 x 10 x 16 in.	3 $\frac{3}{4}$ x 10 x 15 $\frac{3}{4}$ in.	34	590.62	427.5	163.12	27.61	8.88
HOLLOW 4 IN. COURSE	4 x 12 x 16 in.	3 $\frac{3}{4}$ x 12 x 15 $\frac{3}{4}$ in.	41	708.75	511.88	196.87	27.77	10.66
SOLID VENEER	8 x 4 x 16 in.	7 $\frac{3}{4}$ x 4 x 15 $\frac{3}{4}$ in.	37	488.25	488.25			7.11
HOLLOW	8 x 8 x 24 in.	7 $\frac{3}{4}$ x 8 x 23 $\frac{3}{4}$ in.	84	1472.5	1025.10	447.40	30.38	21.33
HOLLOW	8 x 10 x 24 in.	7 $\frac{3}{4}$ x 10 x 23 $\frac{3}{4}$ in.	104	1840.62	1275.03	565.59	30.72	26.66
HOLLOW	8 x 12 x 24 in.	7 $\frac{3}{4}$ x 12 x 23 $\frac{3}{4}$ in.	122	2208.75	1524.97	683.78	30.95	32.
HOLLOW 4 IN. COURSE	4 x 8 x 24 in.	3 $\frac{3}{4}$ x 8 x 23 $\frac{3}{4}$ in.	42	712.50	496.02	216.48	30.38	10.66
HOLLOW 4 IN. COURSE	4 x 10 x 24 in.	3 $\frac{3}{4}$ x 10 x 23 $\frac{3}{4}$ in.	52	890.62	616.95	273.67	30.72	13.33
HOLLOW 4 IN. COURSE	4 x 12 x 24 in.	3 $\frac{3}{4}$ x 12 x 23 $\frac{3}{4}$ in.	61	1068.75	737.89	330.86	30.95	16.
SOLID VENEER	8 x 4 x 24 in.	7 $\frac{3}{4}$ x 4 x 23 $\frac{3}{4}$ in.	56	736.25	736.25			10.66

DISPLACEMENT OF BRICK IS BASED ON COMMON BRICK 2 $\frac{1}{4}$ " x 4" x 8 IN., ALLOWING  $\frac{1}{4}$ " FOR MORTAR JOINTS.

IDEAL SPECIAL SILL and LINTEL MACHINE for making SOLID BLOCKS (or reinforced if desired), with Maximum Measurements as follows:

60" in Length.

18" in Width.

8" in Height.

This Machine is adjustable as to width and height and can be blocked up to produce any length less than 60 inches.

All Concrete Stones are made Face Down in this Machine, thus allowing for the introduction of fine facing material.

This Machine is specially devised for producing Sills, Lintels, Water-Tables, Cornices, Steps, Key-stones, Pavement Slabs, etc., etc. The variety of production on it is only limited by the ingenuity of the operator in laying in wooden moulding, wooden blocks, or other devices for producing the various styles of concrete stone wanted. It is impossible, owing to the variety of work to be accomplished with this machine to provide standard sized face plates or pallets, hence the equipment regularly accompanying the machine is as follows, and is intended more particularly to show how face plates and pallets should be constructed in order to attain the best results.

6x6" Square End Tamp with Wooden Handle.

Right Plain Door.

Left Plain Door.

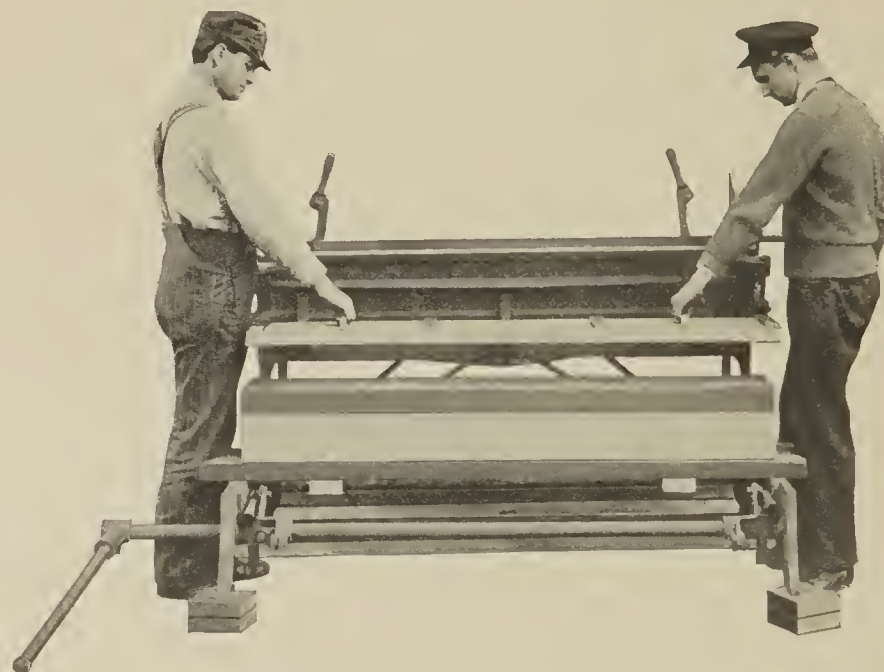
2 Sample Wooden Pallets, re-inforced.

2 Sample Wooden Face Plates, re-inforced.

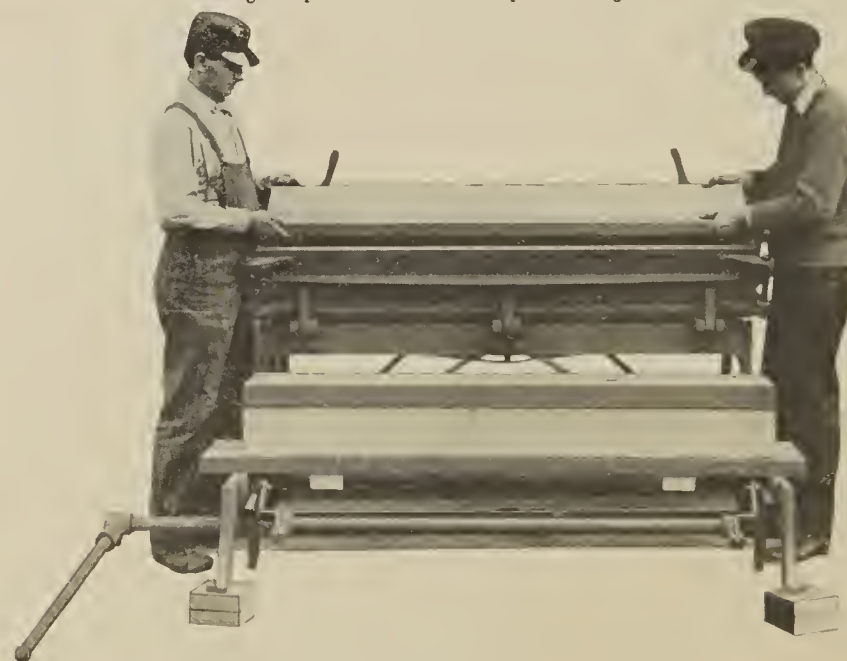
Total Weight of Machine, including all Parts, Gross 1,112 lbs.

PRICE, complete, for outfit as above described       -       -       **\$200.00**

F. O. B. CARS, SOUTH BEND, INDIANA.



Lifting the plain face from the special design form.



Placing Face plate in machine on bottom of mold.

## CONCRETE BLOCK TABLE

GIVING SIZE AND WEIGHT OF BLOCKS, THE NUMBER ONE BARREL OF CEMENT WILL MAKE, THE NUMBER TO ONE CUBIC YARD OF MATERIAL AND THE NUMBER PER SQUARE OF ONE HUNDRED SUPERFICIAL FEET.

HEIGHT.	WIDTH.	LENGTH.	SOLID BLOCKS			HOLLOW BLOCKS			NO. PER SQUARE OF 100 SQ. FEET
			WEIGHT OF BLOCK	NO. PER BBL OF CEMENT AT 1 to 5	NO. PER CUBIC YARD.	WEIGHT OF BLOCK	NO. PER BBL OF CEMENT AT 1 to 5	NO. PER CUBIC YARD	
8 X 8 X 16			73	34	48	50	49	71	112
8 X 10 X 16			92	27	38	67	37	53	112
8 X 12 X 16			109	22	32	80	31	44	112
4 X 8 X 16			35	68	99	24	100	144	224
4 X 10 X 16			44	54	79	32	76	109	224
4 X 12 X 16			53	44	66	39	63	91	224
8 X 4 X 16			37	68	95				112
8 X 8 X 24			112	22	31	77	32	45	75
8 X 10 X 24			140	18	25	92	25	38	75
8 X 12 X 24			166	15	21	112	21	31	75
4 X 8 X 24			54	46	65	37	66	94	150
4 X 10 X 24			67	36	52	46	52	76	150
4 X 12 X 24			79	30	44	55	44	63	150
8 X 4 X 24			55	44	63				75

EXPLANATION = TO FIND THE NUMBER OF BLOCKS FOR A BUILDING, GET THE SURFACE FEET OF THE BUILDING BY MULTIPLYING THE LENGTH AROUND THE BUILDING BY THE HEIGHT OF THE WALL. ADD TO THIS THE SURFACE OF GABLES, THEN DEDUCT THE SURFACE FEET OF ALL THE OPENINGS, THUS GIVING THE ACTUAL SURFACE TO COVER

RULE = MULTIPLY THE NUMBER OF SQUARES TO COVER BY THE NUMBER IN THE LAST COLUMN, FOR THE SIZE BLOCK YOU ARE TO USE, WHICH WILL GIVE THE NUMBER OF BLOCKS FOR ANY BUILDING.

## HOW TO FIGURE THE COST OF BLOCKS.

ONE BARREL CONTAINS  $3\frac{3}{4}$  CUBIC FEET.

ONE CUBIC YARD CONTAINS  $7\frac{1}{4}$  BARRELS.

ONE YARD OF SAND AND  $3\frac{5}{8}$  BBLs OF CEMENT EQUALS 2 TO 1 MIXTURE

ONE YARD OF SAND AND GRAVEL AND  $1\frac{1}{2}$  BBLs OF CEMENT EQUALS 5 TO 1 MIXTURE

IN MAKING BLOCKS, WE RECOMMEND A MIXTURE FOR THE FACING OF 1 PART CEMENT 2 PARTS COARSE SHARP CLEAN SAND, AND THE BODY OF THE BLOCK 1 PART CEMENT 2 PARTS SAND AND 3 PARTS GRAVEL OR BROKEN STONE, THE GRAVEL OR BROKEN STONE TO RANGE IN SIZE FROM  $\frac{1}{4}$ " TO  $\frac{3}{4}$ " IN DIAMETER.

FOR MANUFACTURING 100 BLOCKS 8 X 8 X 16 INCHES THERE IS NEEDED 2.24 BARRELS OF CEMENT, 0.68 CUBIC YARDS OF SAND, AND 1.06 CUBIC YARDS OF GRAVEL OR BROKEN STONE. WHICH AT THE FOLLOWING ESTIMATED COST OF MATERIALS WILL AMOUNT TO -

### EXAMPLE

2.24 BARRELS OF BEST PORTLAND CEMENT AT  $2.00$  PER BBL = \$4.48  
 0.68 CUBIC YARDS OF SAND AT  $1.20$  CU. YD. = \$.82  
 1.06 CUBIC YARDS OF GRAVEL OR BROKEN STONE AT  $1.50$  CU. YD. = \$1.59  
 COST FOR LABOR FOR 100 BLOCKS. \$1.75

INCIDENTALS FOR SAFE MARGIN PER 100 BLOCKS \$.50

TOTAL COST FOR 100 BLOCKS 8 X 8 X 16" = \$9.00

THE ABOVE ARE APPROXIMATE AND CONSERVATIVE PRICES FOR MATERIALS AND LABOR. THESE MAY VARY HOWEVER TO A LESS OR HIGHER DEGREE GOVERNED BY LOCALITY.

THE COST OF CONCRETE BLOCKS IN ANY LOCALITY WILL BE FOUND TO BE MUCH LESS THAN COMMON BRICK AND ARE A BETTER AND MORE LASTING MATERIAL.

# REPORT OF COMMITTEE APPOINTED BY THE NATIONAL CONCRETE MACHINERY MANUFACTURERS' ASSO- CIATION.

## "STANDARD SPECIFICATIONS FOR THE MANUFACTURE OF CONCRETE BLOCKS".

### SPECIFICATIONS FOR HOLLOW BLOCKS

#### DEFINITIONS.

Sand—Such material as will pass through a screen  $\frac{1}{4}$  inch mesh and is retained in screen having mesh 1-64 of an inch. This applies to river sand, bank sand, or screenings from a stone crusher.

#### GRAVEL.

Gravel—Such material, obtained either from a bank or river, of such size as is retained in a screen having  $\frac{1}{4}$  inch mesh.

#### CRUSHED STONE.

Such stone from a crusher as is retained in a  $\frac{1}{4}$  inch screen.

#### BANK GRAVEL.

Such material as is obtained from a pit or river containing both sand and gravel.

#### AGGREGATE.

Any material such as broken stone, gravel, or other fragments used with cement and sand mortar in making concrete for the purpose of reducing the cost and adding to the strength.

#### VOIDS.

The space existing between particles of sand, crushed stone, or materials of which an aggregate is composed.

#### CEMENT.

Any American or imported Portland Cement, which will pass the tests required by the American Society for Testing Materials.

#### QUALITY OF SAND.

Sand suitable for concrete work must not be finer than the above described, must be sharp and gritty; not soft or loamy, must be free from loam or other foreign material, and must not contain any perceptible amount of clay, or other soluble matter. Some authorities concede that clay to the extent of 10 per cent. in sand or gravel is not harmful. This committee is of the opinion that any perceptible amount of clay is unsafe. Crushed stone must be reasonably free from dust, and must be retained on the same sized screen as bank sand, viz:  $\frac{1}{4}$  inch. Gravel or crushed stone must be free from loam, dust, or other foreign material, and must contain no soft or rotten stone.

#### DETERMINATION OF AMOUNT OF CEMENT TO BE USED WITH AGGREGATE.

A theoretically correct concrete should consist of sand and gravel, or crushed stone, or a combination of them, containing any amount of cement equal to the voids in such combination. In other words, interstices should be filled with cement.

To state this in another way, if the concrete is made up of sand and gravel, such proportion of cement should be used with the sand as is equal to the voids in the sand, and such quantity of this resulting mortar of sand and cement should be used with the crushed stone or gravel, as will fill all voids in the crushed stone or gravel.

Re-stating this in a few words, the cement should fill the voids in the sand, and the resulting mortar should fill the voids in the aggregate.

#### DETERMINATION OF VOIDS.

To determine the voids in the sand, or the material to be used as an aggregate, what is known as the "water test" is employed. In preparing for this test the sand or gravel must be perfectly dry. Sand has greater volume when wet.

A receptacle holding a known amount, such as a quart jar, is filled with the material to be tested, sand for example, and into this receptacle is poured as much water as the sand, or other material will absorb. The water should be measured. The amount of water absorbed indicates the voids, and also indicates the exact amount of sand which it is necessary to use in order to produce a solid concrete.

## REPORT OF COMMITTEE—Continued

In making hollow blocks, if no gravel or other coarse aggregate is used, the result of this test should give the proportions of sand and cement to be used in block manufacture. Average sand will absorb 20 to 30 per cent. of water, indicating from 30 to 30 per cent. of voids; also indicating that the proportion to one part of cement to form three or four parts of sand are required to make a solid block.

The proper selection of sand and aggregate material is important. Care should be taken that the particles vary so in size as to reduce the voids to the smallest amount possible. With this careful selection the amount of cement required to produce good work is greatly reduced.

### MIXING

After the materials are selected they should be mixed together dry, until thoroughly incorporated, or in other words until the mass is of an absolutely uniform color. Water should then be applied, and the thorough mixing repeated. The amount of water should be in all cases as great as possible without causing the materials to stick to the molds when the stone is removed.

A little more care in the treatment of the face plates of any machine will enable the manufacturer to use a wetter concrete than is usually employed. Only such size batches should be mixed at one time as can be used up within thirty minutes from the time the water has been added.

### MANUFACTURING

The concrete should be placed in the mold in small quantities, and tamping should begin immediately upon the placing of the first shovelfull, and continue until the mold is full. The material should be tamped with a tamper having a small face, and short, quick, sharp blows should be struck.

In faced blocks the face should be composed of two parts sand and one part of cement, the same being mixed in the manner described above.

Owing, however, to the excess of cement used in facing, and owing further to the fact that the cement is what makes concrete sticky, the facing cannot be used as wet as the balance of the block is made. Great care should be taken to tamp the concrete thoroughly into the facing, so as to unite the two into one solid stone.

In the wet process the amount of water used is such as will produce a plastic, or flowing condition, in the concrete, but not enough to wash the cement from the other material. When placing the material in the molds the entire mold is filled with one pouring.

No stone having transverse ties or webs cracked should be used, or even allowed to cure. Should a slight crack occur in moving the green stone, throw the material back, and make it over. In no case use a cracked stone in a building.

### CURING

All stone made by the medium wet, or medium dry process, should be made under cover, and kept under cover for at least ten days protected from the dry currents of air. If shed room is not available to store a ten days output, the blocks should be carried out after the initial set has taken place, and covered with canvass, hay or other covering, which will retain moisture, and at the same time keep the dry air from circulating around the block. Under no circumstances should blocks be made under the direct rays of the sun, nor should blocks made by this process be exposed to either sunshine or dry winds while curing.

The blocks should be gently sprinkled as soon as possible after making that is, just as soon as the cement has set sufficiently that it will not wash. Blocks should be kept wet from ten days to two weeks, and should never be removed from the yard for the purpose of using in a building until they are from thirty to sixty days old. This is very important. A green block will surely crack in the building on account of shrinkage.

### LAYING

In laying cement stone a soft mortar composed of one-half cement mortar and one-half lime mortar should be used. This mortar should be made with fine sand and free from stone, and should be buttered on the ends of the stone before laying. The stone should be laid in the mortar and worked down. Do not leave end joints open until after the building is completed, because when the end joints are filled at this time shrinkage in mortar is liable to loosen it causing the mortar to fall out, leaving openings through the wall.

The spreading of mortar is very important, because if mortar is unevenly spread so that it is thicker under one portion of the stone than under the other, a leverage is created, which under the weight of the wall above is liable to produce a crack in the stone.

### COLORING

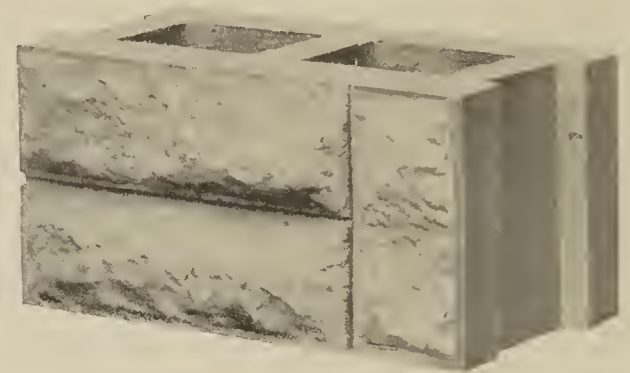
In using coloring matter with concrete, the color should always be mixed with the cement dry, before any sand or water is added. This mixing should be thorough, so that the mixture is uniform in color. After this mixing the combination is treated in the same way as clear cement.



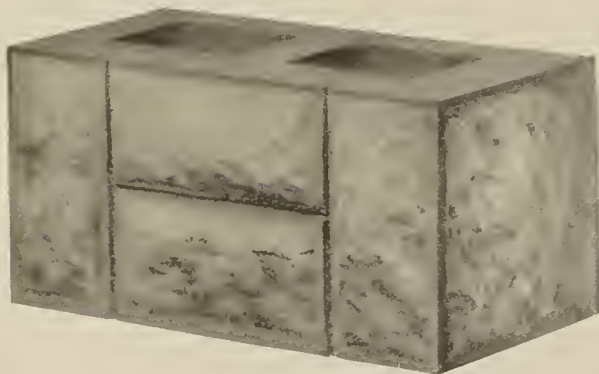
Ashler



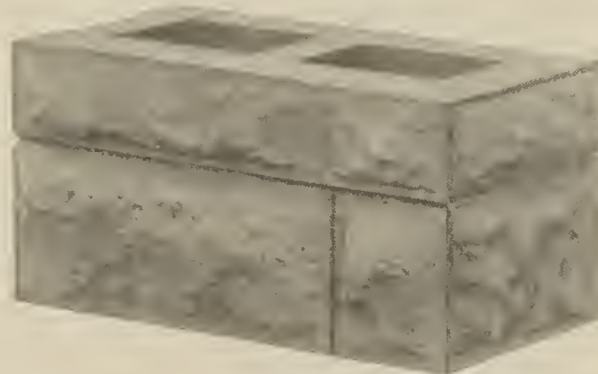
Ashler



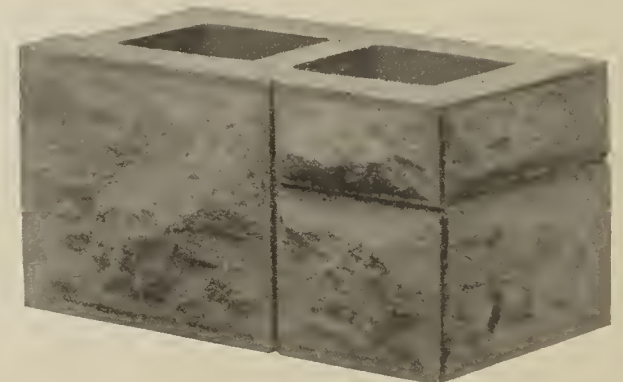
Ashler



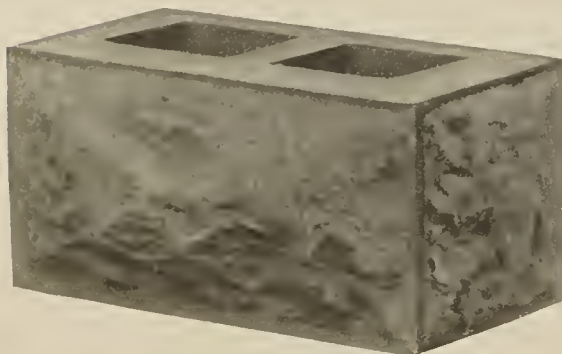
Ashler



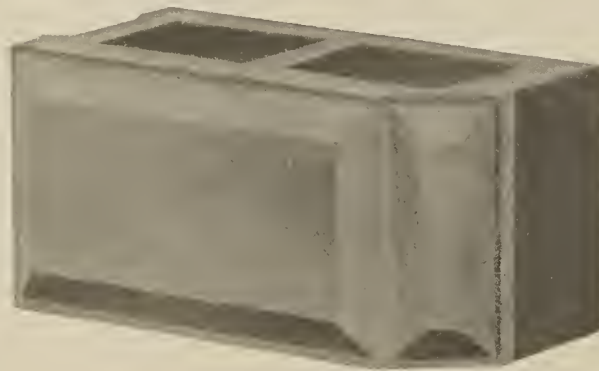
Ashler with End



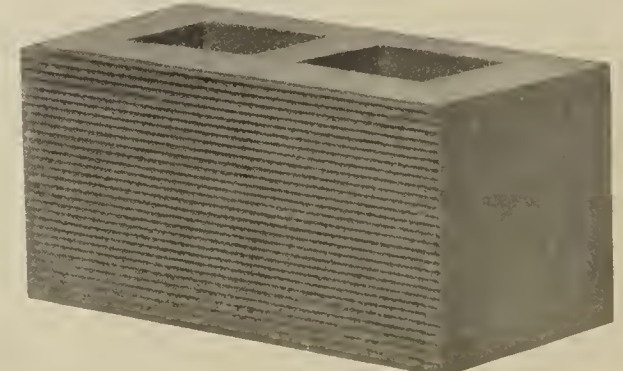
Ashler with End



Rock Face and End



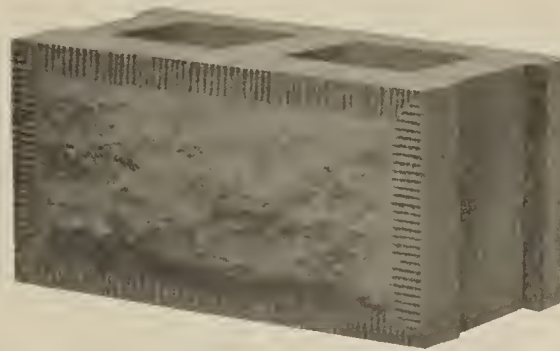
Door or Window Jamb



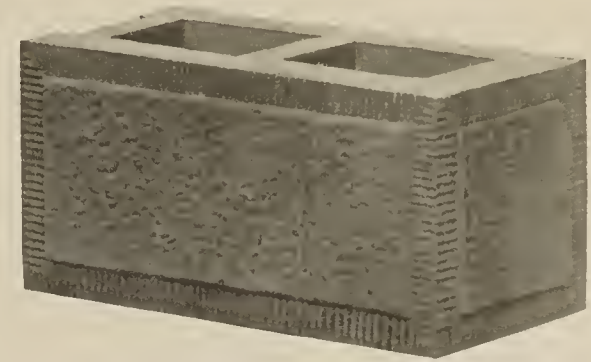
Corrugated



Cobble



Rock Tool Margin



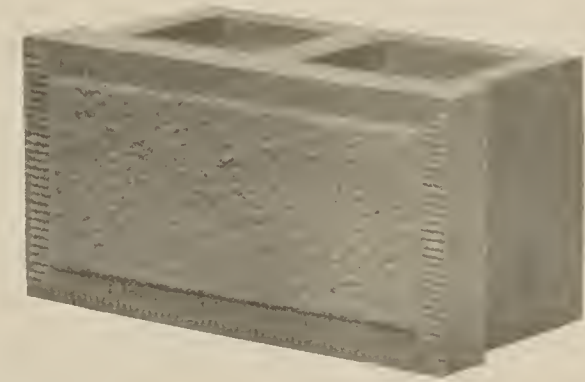
Bush Hammered, Tooled Margin



Water Table



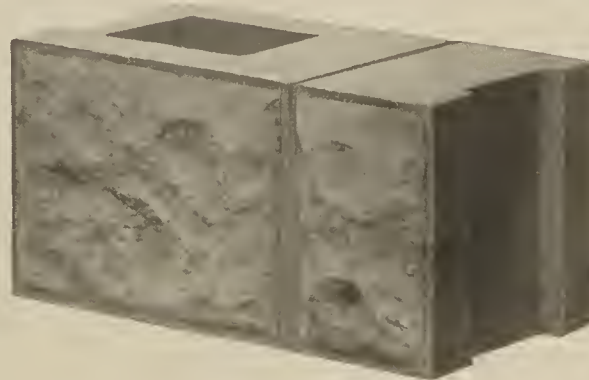
Corner Water Table



Joist



Bush Hammered



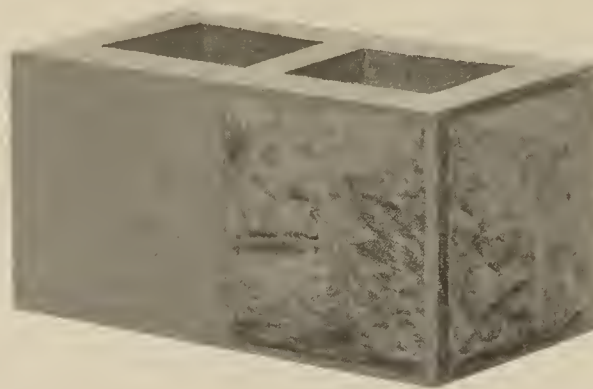
5" and 11" Fractional



8" and 8" Fractional



Veneer



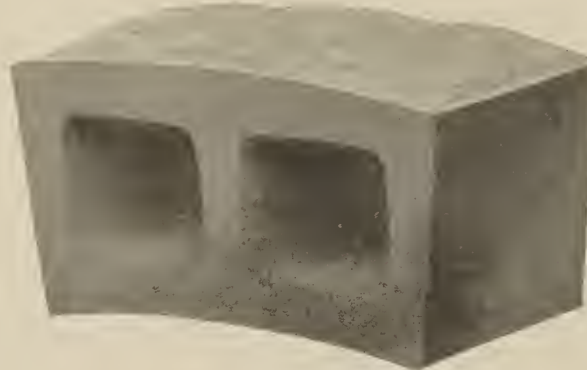
Corner



Jamb Cut Out



Octagon



Circle Rock



Nailing Cleat



Chimney



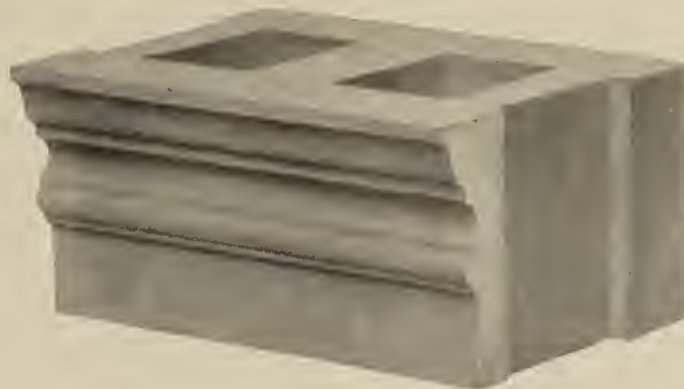
Corner Veneer



Porch Pier



Window Jamb



Cornice



Plain Face, Rock End



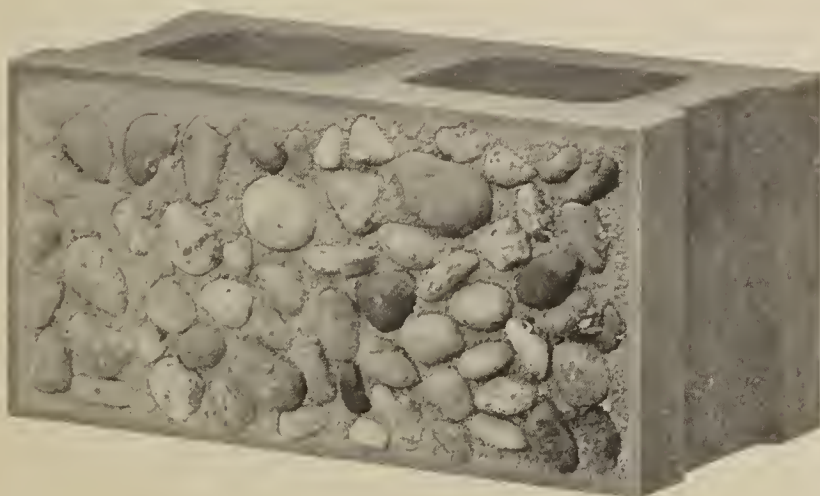
10" Return Corners



Striking-off, Smoothing and Compression Tool. \$2.00



12" Return Corners



An Ideal Concrete Block, in face of which are imbedded genuine pebbles, can only be made on Ideal Machines



An Ideal Concrete Block faced with crushed granite



16 inch High.  
Price, . \$8.00  
18 inch High.  
Price, . \$8.00



Ball

Base 8 inch square, sphere 6 inch diameter, weight 30 lbs.	. \$10.00
Base 12 inch square, sphere 9 inch diameter, weight 52 lbs.	. 14.00
Base 16 inch square, sphere 12 inch diameter, weight 86 lbs.	. 16.00
Base 18 inch square, sphere 15 inch diameter, weight 140 lbs.	. 25.00




16 inch High.  
Price, . \$8.00  
18 inch High.  
Price, . \$8.00


Round Spindle

Square Fancy Spindle

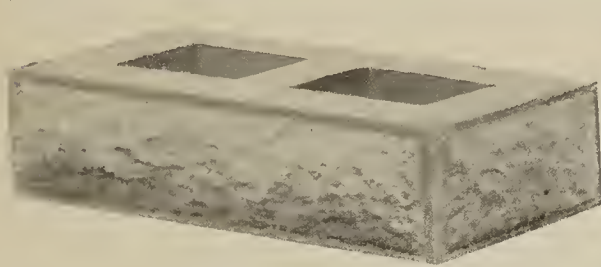


Oval Ornamental  
Course Block,  
showing same  
design on end 

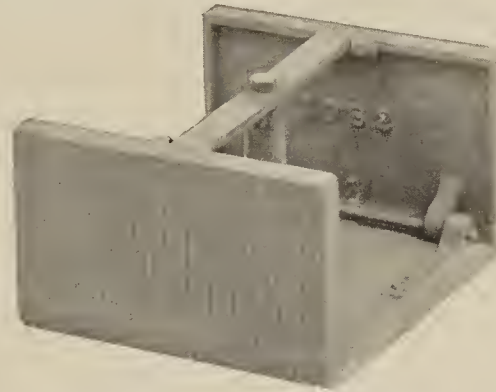
Per Set:  
Oval 8 in. \$11.00  
Daisy 8 in. 11.00

Daisy Ornamental  
Course Block,  
showing same  
 design on end





4" High Course Block



The U Chimney Block Attachment

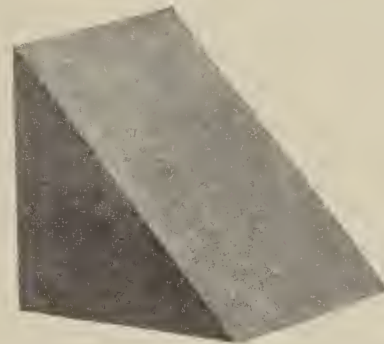


The L Chimney Block Attachment

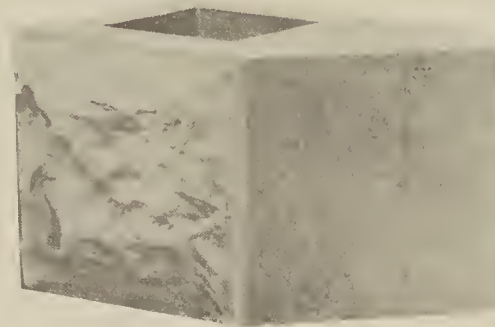
Per Set  
\$ 5.00



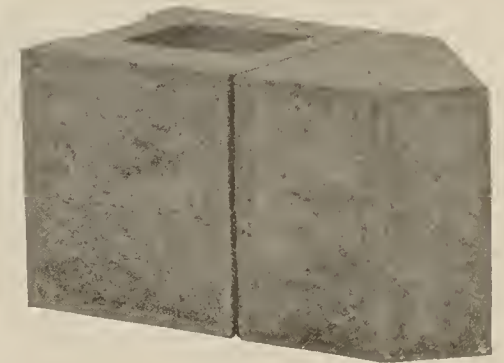
Ionic Capital—Monolithic Shaft



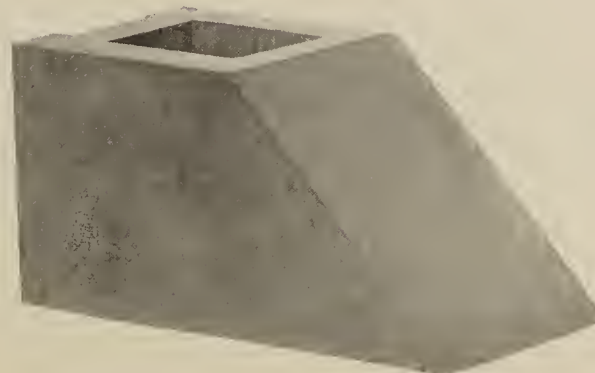
Gable



Octagon



Half Octagon



Gable



Doric Capital

7 3/4 inch High, 16 inch Diameter at Top. Net Weight 58 lbs. \$12.50



CIRCLE SET

Showing circle face plate, rock design, end angle attachments and inner angle scraper. By the use of this scraper the same radius is obtained on the inner face of the block as on the outer. Recognized as of great value in Silo construction.

For Model "A"	.	.	.	Per Set	\$4.00
" " "E"	.	.	.	" "	\$5.00



IDEAL FEED TABLE

Attachable to Ideal Block or Brick Machines for the convenient and rapid handling of material

For Model "A"	.	.	.	.	Price	\$5.00
" " "E"	.	.	.	.	"	\$6.00



VENEER BLOCK OUTFIT

For Model "A"	.	.	.	Price	\$20.00
" " "E"	.	.	.	"	\$25.00

THE OLD WAY.

MOLDS



## LIFT THE MOLD— BREAK YOUR BACK.

OBSOLETE

LABORIOUS

OUT OF DATE

RELEGATED TO THE  
SCRAP PILE

LET THE DEAD PAST  
BURY ITS DEAD

WOOD PALLETS WARP AND  
CRACK THE BLOCKS—  
ARE EXPENSIVE  
IN THE LONG  
RUN

You cannot afford to use an obsolete, ancient, out of date, by-gone method---it will break your back to lift the machine from morning until night. You cannot afford the loss of time. Time lost is money lost. Rapidity counts. Success can only follow in the wake of labor-saving devices---not back numbers. Therefore the placing of the core into position by hand and removal of core after block is finished, the great effort, labor, care and time taken up in lifting the machine from block, the chance of breaking incurred, the space required in allowing blocks to rest where made, all these are back number methods.

THE NEW WAY.

MACHINES



THOUSANDS IN  
USE

UP TO DATE

ONCE USED---  
ALWAYS USED

A MONEY MAKING  
DEVICE

20TH CENTURY METHOD

IRON PALLETS LAST  
FOREVER

You *can* afford to use the up-to-date, 20th century method. To do so means prosperity and success. The "IDEAL" Machine embodies in it's makeup the cardinal principles, Simplicity, Adaptability, Durability and Rapidity, proven not by hundreds, but by thousands of users. In nearly every case our customers shatter our conservative estimate of 200 blocks per day. To prove this, read our booklet "What Others Say About Us". It will assure you of an Ideal's perfection of mechanism, its positive and quick lever action in bringing cores into and out of the mold, in producing blocks with rapidity with the least labor---yet safety, blocks perfect in proportion, sharp cut, clear and clean in appearance, made down face, close grained, and impervious to weather conditions. No loss by handling, but by removal to proper places can be racked so as to use the very minimum of space.

## "IDEAL" HOLLOW BLOCKS LAID IN WALL.

Compared to Bricks—By a Competent Consulting Engineer for Ideal Concrete Machinery Co.

If a man were to build a house or a residence of bricks and he desired to substitute Ideal blocks for bricks, he would find that where he would build a 2 brick wall, he would substitute 12 inch blocks, and he would build the wall  $1\frac{1}{2}$  brick thick, he would substitute 8 inch hollow blocks.

The Ideal 8x8x16 inch block, including the joint, covers 128 sq. inches wall surface, and consequently one sq. foot of wall surface would require 1.12 blocks. While one sq. foot of wall surface of the brick wall would require 21 bricks. It will therefore take 54 Ideal 8x8x16 inch blocks to substitute 1,000 bricks in a wall  $1\frac{1}{2}$  brick thick.

The price for laying these 8x8x16 inch blocks which weigh about 50 lbs. each, should not exceed 5 cents each.

Cost for laying 54 "Ideal" blocks at 5c.....	\$ 2.70
Cost for laying 1,000 bricks, average not less than .....	5.00

Saving in laying the equivalent to 1,000 bricks .....	2.30
Purchase price for bricks will average for face bricks and common, not less than .....	\$14.00
Cost of manufacturing 54 blocks, for labor and material, at $9\frac{3}{4}$ cents each .....	5.30

Saving in cost for the equivalent of 1,000 bricks, using Ideal blocks.....	\$ 8.70
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Or if we figure the total saving for material and laying, this saving will be for each 54 blocks, substituting the 1,000 bricks, \$2.30 for laying, \$8.70 for material .....	Total, \$11.00
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Suppose now we were to build a two-story residence, about 40x40 feet of bricks. The outside walls would require about 90,000 bricks, and by substituting the hollow blocks for the bricks, there would on the outside walls alone, according to above calculations, be saved \$990.00, and a proportional amount might be saved on the partitions.

Finally it must be considered that if the blocks are well made with a facing of 1 cement and 2 sand, and particularly if 1 to 2 per cent of the Ideal Waterproofing Filler—which will increase the cost of the block  $\frac{1}{4}$  cent only—is mixed in the facing material, the cost of lathing and furring, and also the rough coat of plaster can be saved, as these kind of blocks will guarantee an absolutely dampproof wall, and when it is further considered that insurance rates are low—that the hollow block makes a cool house in summer and a warm house in winter—and finally, that such a structure does not deteriorate for the lack of paint or care, but is built to stay and to increase in solidity and strength as the years pass by, I am confident that further comment on the economy of "hollow blocks" versus other building material for house construction is absolutely useless.

## COST DATA FOR "IDEAL" HOLLOW BLOCKS.

Computed by a Competent Consulting Engineer for Ideal Concrete Machinery Co.

Unit price to be adjusted for various localities.

One block including joint, of 8x8x16 inch has 32.6 per cent voids, and contains 0.39 cubic foot of material—consequently one cubic yard of mixed material will make about 69—8x8x16 inch blocks.

It is recommended to use a mixture for the facing of 1 cement and 2 sand, and for the balance of the block 1 cement, 2 sand and 3 gravel, and in which the pebbles for the gravel do not exceed  $\frac{3}{4}$  inch diameter.

The material necessary to prepare 1 cubic yard of mixture is approximately 1.54 bbls. of cement, 0.47 cub. yard of sand, and 0.73 cub. yard of gravel, being sufficient for 69 blocks.

For manufacturing 100 blocks there is needed—2.24 bbls. cement, 0.68 cub. yard sand, and 1.06 cub. yard gravel; which, at the following prices, will amount to—

2.24 bbls. of best Portland Cement at \$2.25 per bbl.....	\$5.05
0.68 cub. yard of Sand " 1.25 " cub. yd. ....	.85
1.06 cub. yard of Gravel " 1.50 " " " .....	1.59

Cost of material for 100 blocks of 8x8x16 inch .....	\$7.49
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In manufacturing these blocks, two laborers of ordinary intelligence can do all the work incident to the manufacture, and can with ease turn out 200 blocks a day and generally more. For one man \$1.50 and the other \$2.00 per day.

Cost for labor for 100 blocks .....	\$1.75
Incidentals \$1.00 per day, or for 100 blocks.....	.50

Cost of labor for 100 blocks 8x8x16 inch.....	\$2.25
Or total for material and labor for 100 blocks .....	\$9.74
The sales price f. o. b. factory should not be less than 25 cents per block, but even at 20 cents, sales price on 100 blocks is.....	\$20.00

Safe net profit for manufacturing 100 blocks .....	\$10.26
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This net profit of \$10.26 per 100 blocks must be considered a minimum, as it will be noticed that the unit prices figured with are high, and it must not be overlooked that in many localities the Portland cement can be had much cheaper, and also that where sand and gravel can be had at nominal prices, the expense of manufacture will be very considerably decreased, and consequently, the profit proportionally larger.

And it must also be considered that the above calculations are made for a capacity of only 200 blocks a day, and that if several machines are operated and power mixer employed, and where, on account of larger consumption, the raw material can be had cheaper, the manufactured block will be cheaper.

## TO FIND THE NUMBER OF BLOCKS REQUIRED FOR A HOUSE OF ANY DIMENSIONS.

Find the number of feet around the walls, multiply by three and divide by four. This will give approximately the number required for one course (not taking window or door openings into account). The height of wall, in inches, divided by eight, gives the number of the courses, which, when multiplied by the number in one course, gives the number of blocks for the whole building. For example: A building 30 feet square would be figured as follows: 30 by 30 equals 120 feet around, times 3, divided by 4, equals 90 blocks in one course, 240 inches high, divided by 8, equals 30 courses. 30 times 90 equals 2,700 blocks.

## RAPIDITY OF CONSTRUCTION.

As proof in favor of block construction in comparison to brick, we find that a mason should lay from two to three blocks in the wall in the same time it takes him to lay fourteen bricks or the equal of but one block. A common mason will lay 100 8x8x16 inch "Ideal Blocks" per day, but a first-class one will do better. The average wages at 50c per hour means a cost of 5c per block to lay in the wall. The cost of laying cement blocks will vary with the class of work desired. We find upon close investigation that prices vary as to the laying of blocks in the wall. They can be laid as cheap as 2c each, but we prefer to make a conservative estimate by placing the average cost at 5c per block. Contractors figure the cost of laying a common brick at \$5.00 per M. under ordinary conditions.

## TRUISMS.

A thoroughly well made concrete stone is conflagration proof. That is to say, it is fire-proof to the point of white heat, and if while in this condition it is drenched with or immersed in water it will still retain its form and strength.

When only one month old a good concrete stone will stand a crushing test of from 1,500 to 1,700 pounds per square inch, which is amply sufficient for ordinary building purposes with a good margin of safety, and then it becomes much stronger as it grows older.

Concrete stone has still another, and it is a very important and advantageous quality. It costs less than any of the natural materials of equal quality with which it comes into competition. Experience has shown that it always pays to use a good high grade Portland Cement.

A barrel of Portland Cement weighs 380 pounds.

## MATERIALS FOR ONE CUBIC YARD OF CONCRETE.

Proportions	Bbls. Cement in 1 Cubic Yard	Bbls. Sand in 1 Cubic Yard	Bbls. Gravel or Stone in 1 Cubic Yard
1 : 2 : 4	1.57	3.14	6.28
1 : 2 ½ : 5	1.29	3.23	6.45
1 : 3 : 6	1.10	3.30	6.60
1 : 4 : 8	0.85	3.40	6.80

## SPRINKLING.

Blocks should not be allowed to dry out from seven to fourteen days. They should be kept sprinkled with a hose, or, better, a lawn sprinkler attached to an overhead pipe running around the yard.

## LAYING.

In building a building, the blocks and the course below are thoroughly wet, so that the mortar will adhere to the blocks and become a monolith. When so laid a wall cannot be pulled apart. The blocks will break before separating at the mortar joint.

## BRICK WORK.

Brick work is generally measured by the superficial foot. Walls are estimated to contain 22 ½ brick to the cubic foot. A 9-inch wall contains 15 brick. A 13-inch wall contains 22 ½ brick. An 18-inch wall contains 30 brick. A 21-inch wall contains 37 ½ brick.

Thus one of our blocks, 8x8x16 inch, is equal to 14 bricks.

## HOW TO ACCOMPLISH THE "BORST SYSTEM" OF FACING BLOCKS ON THE "IDEAL BLOCK MACHINE.

The principle is the forming of the face of our blocks downward in the bottom of the mould, thus enabling the starting of the block by a thin layer consisting of an ingredient of one part cement and two parts finely sifted sharp sand, these two parts to be first well mixed in their dry state, and then carefully moistened and again well mixed, to a consistency so that it will pack nicely in the hand. This is first placed loosely into the mold, using the hand to carefully spread same over every part of the face-plate. Then, before tamping, place a good quantity of the backing, consisting of a coarser material (sand and gravel or crushed stone mixed in the ratio of four or five to one of cement), on top of this first layer, and the tamping is then begun, which, by our method of direct pressure at right angles to the face of the mold, will thoroughly amalgamate, thereby forming a bond of union by the intermingling of the two mixtures, assuring a facing impervious to moisture, heat or frost, which cannot separate. The cores are then used as per instructions, and the backing of block is continued until completed,\* or it further enables a facing of the block in imitation of natural stone of various colors.

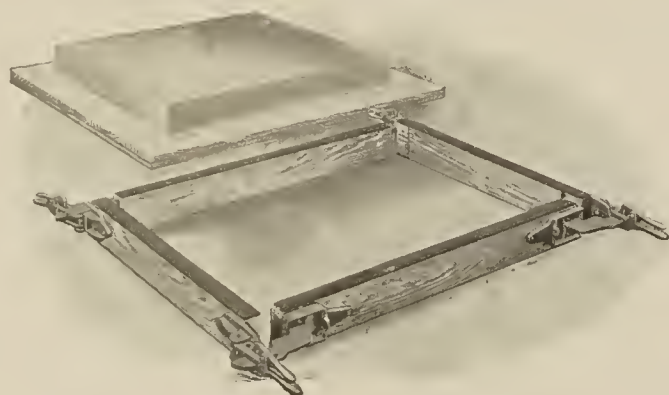
### "IDEAL MIXER"

We regret to inform the interested public that, in the haste of publishing this catalog, we were unable to devote space to show a cut and description of our new Ideal Continuous Dry and Batch Mixer, but are covering the subject under separate folder.

We have devoted nearly two years in developing this Mixer to the state of perfection and practicability enjoyed by our Ideal Block machines, and made it particularly adaptable to the needs of the Block Maker.

We seek your investigation, and will take pleasure in forwarding details and information.

### IDEAL SIDEWALK MOLD



Has no equal for the manufacture of Sidewalk Slabs, Porch Floors, Water Tanks, Etc.

The "Ideal Sidewalk Mold" is especially designed for making sidewalk slabs from 2 inches to 4 inches thick. It is also extensively used for making porch floors and water tanks. To obtain the best results in every way and a perfectly smooth and natural stone finish, make the slabs face down, using one quarter inch of fine white sand, rich with cement, in the bottom of mold, for the facing, and very coarse material for the balance of the slab.

A slab thus made excels troweled work in appearance and yet maintains quality and durability in every particular, besides being a materially cheaper and quicker operation.

The regular size is 24x36x4 inches, although we make any size to suit purchaser.

Price, Regular Size, **\$25.00**

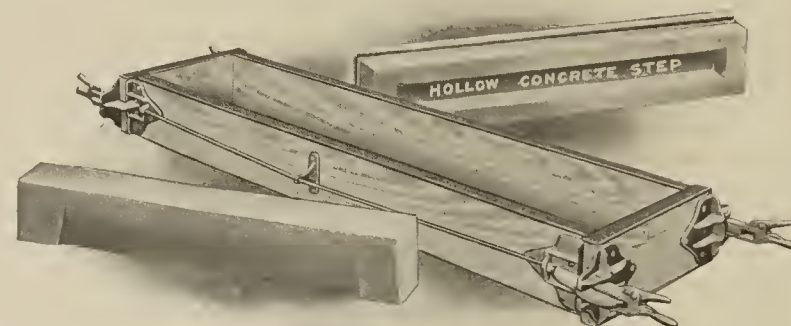
#### THE COST OF A SLAB 24x36x4 INCHES

There are 3456 cubic inches in this size, making 13½ slabs from one yard of sand. To make the same size 2 inches thick, 27 slabs are made from 1 yard of sand. One yard of sand and 1 barrel of cement make about 6 to 1. (See Cut.)

We make Molds of any special size to suit requirements outside regular size. Write us for Prices and Information.

FORMERLY KNOWN AS "WHITE CEMENT MOLDS"—MADE AT JACKSON, MICH—THE BUSINESS HAS BEEN PURCHASED BY US

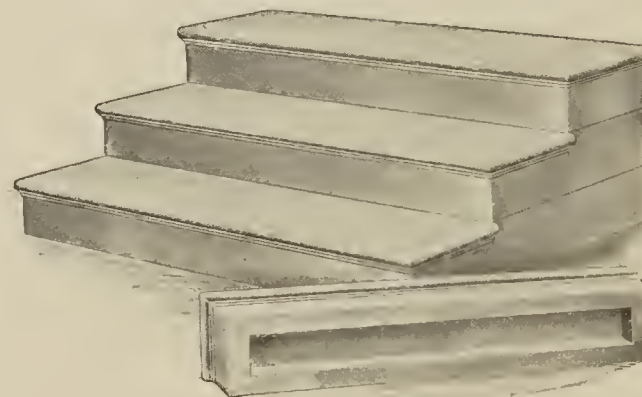
### IDEAL CEMENT SILL MOLD



The only Practical Mold yet devised for making Door and Window Sills. Caps, Water Tables, Copings, Steps, Silo-Blocks, Sewer and Chimney Blocks, Thoroughly Practical---Remove Mold instead of Block---Simple and Quick to Operate---Has no Weak Points.

Price. 6 foot length, **\$35.00**

### IDEAL CEMENT STEP MOLD



As nearly every user of these molds would require different sizes and designs of inside forms, we do not furnish such forms except upon special order, and will quote price of such upon application.

The steps are made hollow, which reduces the material and weight one-third. They are made plain or a flange around top. The exposed parts can be made with a rich facing of any material desired and the balance of coarse material. The cost of material is about 5 cents a running foot—7 inch riser, 13 1-2 inch tread—which is cheaper than pine, with a good margin for doing the work. The step is not only cheaper, but very much nicer than can be made in the old way. (See Cut.) **SPECIAL SIZES MADE TO ORDER.**

Price. Regular Size, **\$40.00**; Extra Set of Inside Forms, Each **\$5.00**



The changing of a face plate of any design is but the work of an instant; when machine is open the face plate is in an upright position, but with the closing of the machine drops into place horizontally in the bottom of the mold

## COLORS FOR CEMENT AND CONCRETE WORK.

### RED.

87 parts fine ground Portland cement.  
11 " oxide of iron.  
2 " black oxide of iron or copper.  
100

### YELLOW.

84 parts fine ground Portland cement.  
14 " yellow oxide of iron.  
2 " black oxide of iron or copper.  
100

### BLUE.

80 parts fine ground Portland cement.  
18 " azure blue or ultramarine.  
2 " black oxide of iron or copper.  
100

### GREEN.

85 parts fine ground Portland cement.  
12 " oxide of chromium.  
3 " black oxide of iron or copper.  
100

### CHOCOLATE.

88 parts fine ground Portland cement.  
6 parts blk. oxide manganese.  
4 parts red oxide of iron.  
2 parts black oxide of iron or copper.  
100

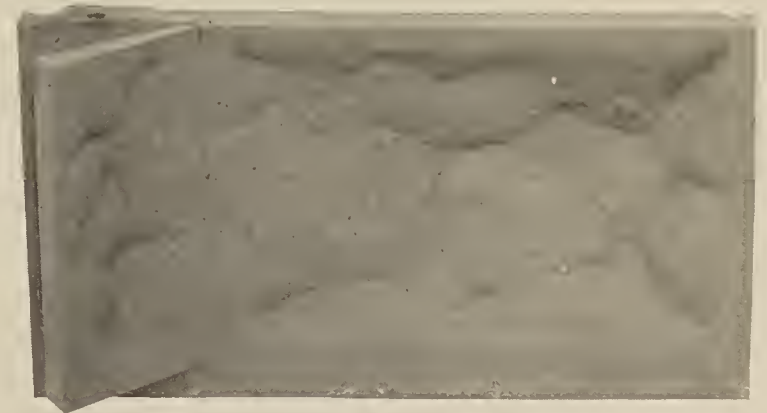
### BLACK.

87 parts fine ground Portland cement.  
13 parts black oxide of manganese or any carbon black.  
100

### WHITE.

67 parts fine ground Portland cement.  
33 parts powdered chalk or sulphate of barytes.  
100

## ADJUSTABLE OCTAGON FACE PLATE

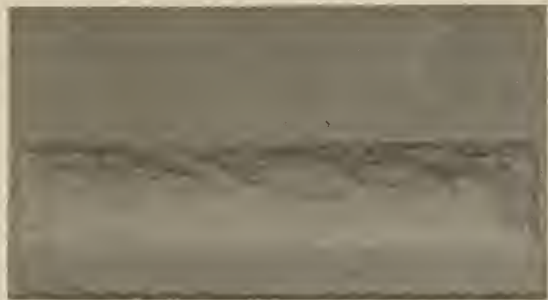


FRONT VIEW



REAR VIEW

For Model "A," . \$5.00      For Model "E," . \$7.00



COURSE BLOCK ATTACHMENT

For producing blocks 4 inches high. Shows half plain and half rock face plate, skeleton blank and the right and left half rock and half plain doors.

For Model "A" 8 inch	\$13.00
" " "A" 10 "	\$12.75
" " "A" 12 "	\$13.50
" " "A" 8 inch—6 inch High Course Block Attachment	\$13.00

NOTE—Above outfit does not show Face Plate divided into one-half and two-quarters and 2 Dividing Plates, but they belong and are sent with the regular outfit.



WATER TABLE SET

Showing Face Plate, Return Corner Attachment and Skeleton Blank

Model "A" 8 inch	\$5.00	Model "E" 8 inch	\$7.00
" " "A" 10 "	\$5.00	" " "E" 10 "	\$7.00
" " "A" 12 "	\$5.00	" " "E" 12 "	\$7.00

## QUESTIONS FREQUENTLY ASKED OF US---WHAT INQUIRERS WOULD LIKE TO KNOW.

**1. Question.** Please quote us your best prices and terms.

Answer. See Page 9 for price on Outfit No. 1, and Page 7 for terms.

**2. Q.** What do blocks cost, and what proportions of sand and cement are used?

A. See Page 31 for cost of blocks, also proportions used.

**3. Q.** Are concrete blocks profitable?

A. They are. See book, "What Others Say About Us."

**4. Q.** How does the cost of blocks compare with bricks?

A. They are cheaper, stronger and more durable. See Page 42.

**5. Q.** I want to know the price of a machine, its capacity and its weight.

A. See Page 9 for price. For capacity, see our book, "What Others Say About Us." "Ideal" Machines are the most rapid manufactured. Weight is shown with each quotation. All machine outfits show gross weight of machine, pallets, and parts combined.

**6. Q.** Can all the different designs be made on one machine, or does it require different machines to make different sized blocks?

A. All designs can be produced with an "Ideal" Machine. "Ideal" Machines are interchangeable, Model "A" producing any length blocks from 1 inch to 16 inches; and with proper attachments, veneer blocks 4 inches wide, also 6 inch, 8 inch, 10 inch and 12 inch widths, in hollow or solid blocks, also 4 inch and 6 inch high course blocks. Our Model "E" produces blocks 24 inches long, or any part of that length, and is interchangeable to 6 inch, 8 inch, 10 inch and 12 inch widths, the same as Model "A." Brick Machine Attachment can be had for either model.

**7. Q.** What do the blocks weigh?

A. See concrete block table, Page 29.

**8. Q.** Can the blocks be used as soon as they are made, or do they have to be seasoned?

A. They must be seasoned---known as curing. See our answer to Question No. 21.

**9. Q.** Can blocks be made of just sand and cement, or must gravel be used?

A. Blocks **can** be made of sand and cement, provided the sand is coarse and sharp, but it makes a better block to use gravel or broken stone. See Pages 32 and 33 for Standard Specifications.

**10. Q.** Will broken stone do to use in place of gravel? If so, what size should be used?

A. Broken stone can be used in place of gravel, and should range in size from 1-4 inch to 3-4 inch.

**11. Q.** Suppose we only want to build a house; what assortment would you recommend?

A. We would recommend our Outfit No. 1, Page 9.

**12. Q.** Could we make the blocks ourselves?

A. Easily. It requires no previous experience to make "Ideal" blocks. Instructions are sent with the machine. "Ideal" Machines are so marvelously simple a boy can operate them.

**13. Q.** We are going in the block business. What equipment would you advise for an up to date plant?

A. For the starting of an up to date plant, we advise parties to carefully feel their way. We do this because our machines are so built that equipment, attachments, parts and accessories can be added at any time, and are guaranteed to fit. We are always pleased to give our best advice and counsel, when asked, in the proper selection of a suitable outfit.

**14. Q.** Do your blocks make a dry house?

A. Unequivocally they do. They must be made properly and seasoned sufficiently.

**15. Q. Do you recommend plastering directly on the back of the block?**

A. It can be and is done, but we cannot recommend it unless "Ideal" Waterproofing Filler is used in the facing.

**16. Q. Are concrete blocks strong? Will they stand the pressure of an ordinary two-story building?**

A. They are strong beyond doubt. See reports of tests, Page 15. They will stand the pressure of any building, and are now used in every kind of construction.

**17. Q. How many blocks will your machine turn out in one day?**

A. We claim a conservative capacity of 200 per day, but we prefer to have you read what our customers say, therefore see our booklet, "What Others Say About Us."

**18. Q. How many blocks 8x8x16 inch will one barrel of cement make?**

A. You will find reply on Page 31.

**19. Q. Can we figure the cost of blocks ourselves, and how?**

A. You will find reply on Page 31.

**20. Q. What buildings are necessary to make blocks in?**

A. Any old building or shed with a roof, or a tent of sufficient size to protect a few days' output of blocks from heat, sun, wind or dashing rain on green blocks, will answer the purpose.

**21. Q. How are blocks cured, and what do you mean by curing?**

A. By curing blocks is meant they should be kept moist continually for from 7 to 10 days. If operating within an enclosure it may not be necessary to spray them for the first 24 hours, but if simply protected by a roof, allowing drying winds to reach the block, you should commence spraying them within five or six hours, or just as soon as it can be done without washing the face. They should remain in the curing yard from 20 to 30 days before laying them in the wall.

**22. Q. What is a pallet?**

A. The pallet is an off-bearing plate upon which the block rests and is carried away when removed from machine.

**23. Q. How long must the block rest on the pallet before being removed?**

A. The block must rest on the pallet until it obtains its initial set, which takes anywhere from six to twelve hours, but we advise that blocks be left on pallets for 24 hours, and when ready to remove them from the pallet, the pallet should be lightly tapped with a hammer so as to loosen the same from the block, if it shows a tendency to stick.

**24. Q. Do you guarantee your machines?**

A. We do. See Page 8.

**25. Q. Do you give instructions about operating machines, and materials to be used?**

A. We do. We send specific and clear instructions respecting the operation of the machine. You will also find standard specifications for manufacturing blocks on Pages 32 and 33.

**26. Q. What do masons charge for laying blocks?**

A. The price varies in different localities, it depending of course on labor conditions. An average price, however, would be 5 cents per block.

**27. Q. How many blocks will a mason lay in the wall in a day?**

A. A good mason will lay 100 "Ideal" Blocks per day, but a first-class one will do better.

**28. Q. Can blocks be laid in the wall cheaper than brick?**

A. Blocks can be laid cheaper than brick, and any good mason should lay from two to three blocks in the wall in the same time that it would take him to lay 14 bricks, or the equal of but one block of the 8x8x16 size.

**29. Q. Does your machine make blocks in different lengths?**

A. It does. You can make blocks on the Ideal Machine of any length from one inch up to the full size of the block with proper margin on each and is the only machine which will do so.



Perrysburg, Ohio, Water Works and Power House. Erected in 1906, 2165 blocks used. The building is 26x40 feet, one story, 12 feet high. The building is of special design, very handsome, and cost about \$2500.00. All blocks used were made on an Ideal Machine. 8x8x16 inch Blocks used.



Pleasant effect in a Seaside Cottage by the use of 8x8x16 inch Ideal Blocks. Blocks supplied by L. M. Taylor, Asbury Park, N. J., who operates five Ideal Block Machines.



An artistic country School House. Entire building erected of 8x8x16 inch Ideal Blocks. This is a Township School, strictly in a farming district, about 12 miles from Berne, Ind. The Contractor met the bids of brick and lumber construction.



Retaining wall built of 8x8x16 inch Ideal Blocks on the residence lot of Mrs. Peter E. Studebaker, South Bend, Ind. The residence is to the right of the wall facing West Washington St., upon which street is situated the famous homes of several of the Studebakers and Olivers.



Office Building of the Sandusky Portland Cement Co., at Dixon, Ill. The Company purchased Ideal Machines and made their own Blocks. The face design used was our Bush Hammered-Tooled margin. This same Company is using Ideal Machines at their plants in Syracuse, Ind., and York, Pa.



Cement Mill, erected by the Sandusky Portland Cement Co. at Dixon, Ill. The Company purchased Ideal Machines and made their own Blocks for the erection of their entire plant.



Livery Stable of Wm. Metz, Columbia, South Carolina. Dimensions, 50x150 feet. Ten thousand (10000) 8x8x16 inch Ideal Blocks used. In case of fire, the chances of saving the horses would be ten to one against frame construction---Vermine proof also.



Cold Storage Building. Size 30x40 feet. This building was erected in conjunction with the Wood County Poor Farm Building near Bowling Green, Ohio. It was erected during 1905, and is constructed entirely of Ideal Blocks, there being used 2380 blocks 8x8x16 inch, and 2077 blocks 4x8x16 inch. Two inch air space between the eight and four inch thick blocks.



Mausoleum or Burial Vault, erected in Fort Meigh Cemetery at Perrysburg, Ohio. Its interior dimensions are 10x14 feet. The blocks used were made on an Ideal Machine of 8x8x16 inch size, alternating with 4x8x16 inch blocks. It is constructed of two tiers of blocks, thus making a double wall 16 inches thick. The total cost was \$350.00. It was erected by Mr. E. L. Kingsbury in 1905, his wife being buried therein. The vault is perfectly dry and is very satisfactory. The roof is of concrete and permits of ventilation.



Automobile Garage built for Dr. W. H. Hoppenrath at Elwood, Ind., by The Artificial Stone Co., C. W. Foster, Manager. Ideal Blocks used 8x8x16 inch. The Masons being prejudiced, refused to lay the Blocks, so Mr. Foster took two Hod Carriers from a building. These men had never placed a brick or block in a wall. Their work substantiates our claims of ease with which Blocks are laid.



IDEAL CONCRETE MACHINERY CO., South Bend, Ind.

DEAR SIR;—We this day send you photograph of Double House. Number of Blocks used, 5720. Cost of building, \$5,500.00. Blocks made on the Ideal Machine. Hope to meet you in Chicago at the Convention.

Yours,

Eaton, Ohio, Dec. 14, 1906

H. M. YOUNG & SON



One of the buildings of the plant of the Fairmount Glass Works, Indianapolis, Ind. All 8x8x16 inch Ideal Blocks. Ideal Machines bought by the Company who made their own Blocks.



Residence built by Wm. J. Conk, Contractor and user of Ideal Machines, at Long Branch, New Jersey. Notice the Porch---  
Sun Parlor in winter---Cool Porch in summer.



IDEAL CONCRETE MACHINERY COMPANY. South Bend, Ind.

Hope, Ark., Aug. 15, 1905.

Gentlemen:---Will say that your machine has the proper name---it is the Ideal. plans for a \$10,000.00 Baptist Church to be built with blocks from your machine.

At Hope, with five machines to select from, an Architect just finished  
Yours truly,

J. T. ROBISON.

Nov. 10, 1906.---Above shows the completed church, 8x8x16 inch Blocks used. Photo sent in by Mr. Robison.



IDEAL CONCRETE MACHINERY CO., South Bend, Ind.

Covington, Ky., July 12, 1906.

Gentlemen:—We are sending you under separate cover a photograph of a concrete block house that was built for us in Lake View Park, Latonia, Ky., by Asbury & Jameson Co., from blocks made by the IDEAL Machine. We are very well pleased with the blocks and think they are the best that have been made from any machine in this section of the country. Trusting that the photo will be of service to you, we are, Yours truly, "Coppins"

J. ROBERTS COPPIN, Jr.



Residence built by Mr. A. W. Hays, Joliet, Ill., with an Ideal outfit costing \$138.00. Notice the elimination of monotony or sameness in his wall construction by the use of Rock design 8 inch high Blocks, alternating with 4 inch high course Blocks continued for the entire first story---for the second story plain blocks were used.



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L. P. HARDY CO., SOUTH BEND, IND.